



IMPACT



Orthopaedic Research
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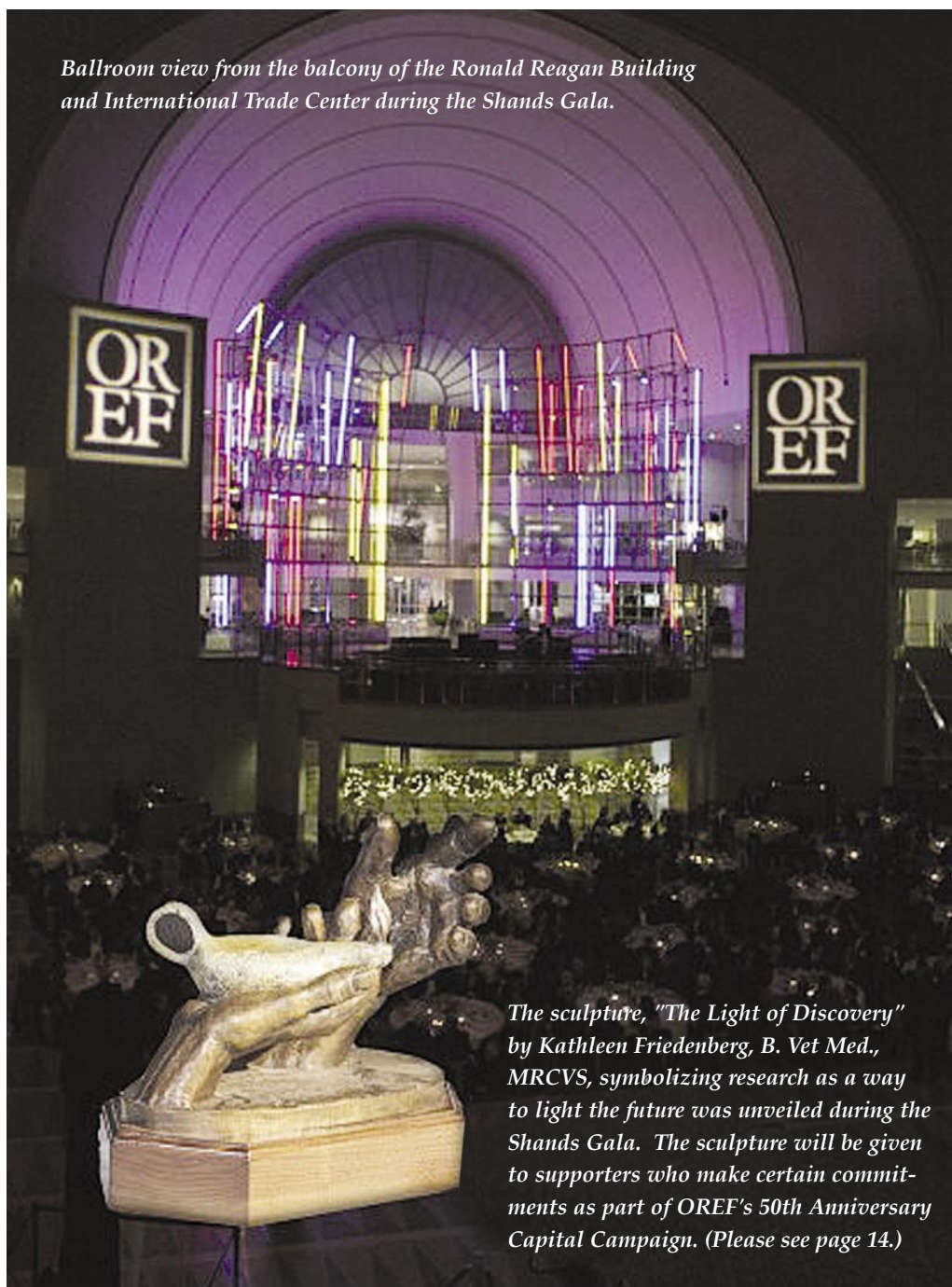
VOLUME VII

SPRING 2005

NO. 1

Please Support OREF's 50th Anniversary Campaign

Ballroom view from the balcony of the Ronald Reagan Building and International Trade Center during the Shands Gala.



The sculpture, "The Light of Discovery" by Kathleen Friedenberg, B. Vet Med., MRCVS, symbolizing research as a way to light the future was unveiled during the Shands Gala. The sculpture will be given to supporters who make certain commitments as part of OREF's 50th Anniversary Capital Campaign. (Please see page 14.)

OREF publicly introduced its 50th Anniversary Capital Campaign on Feb. 24, 2005 at the Shands Circle Gala held at the Ronald Reagan Building and International Trade Center. The campaign's goal is to raise \$100 million to permanently endow many research awards. (For more information please see page 14.)

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Victor M. Goldberg, M.D.
2003-2005 Board Chair

It has been one of the most enjoyable periods in my career as an orthopaedic surgeon to have served as the Chairman of OREF's Board of Trustees. In my two years, OREF increased its endowment from \$13.4 million to \$19.5 million, welcomed more than 130 new Shands Circle members, increased corporate support by 32%, and funded more than \$5.7 million in orthopaedic research.

This would not have been possible without the support of all of our Trustees, orthopaedic surgeons, and our National Board, which will play a critical role in coming years. We are also grateful to our sponsors in the orthopaedic industry who have been so gracious in their support of OREF through the years.

At that event, I was privileged to publicly introduce OREF's 50th Anniversary Capital Campaign. We have set an ambitious yet reachable goal of raising **\$100 million** to permanently endow many research awards, thereby safeguarding the advancement of our specialty for years to come.

To date, we have more than \$ 51.5 million in annual and endowment gifts, some paid in cash and others part of planned gift arrangements. Please join us in this important effort. Cash gifts help us fund ongoing research and education efforts. Deferred gifts will help us ensure a strong future. A unique feature of this campaign is the chance to endow a named research award, a very special way to leave your own personal legacy to orthopaedics (*please see page 14.*)

Once again, it has been my sincere pleasure to serve as OREF's Chair these last two years, and I thank you so much for your support.

A unique feature of this campaign is the chance to endow a named research award...

Victor M. Goldberg, M.D.
Past Board Chairman

About Impact

Impact is published quarterly by the Orthopaedic Research and Education Foundation, a 501 (c) (3) tax-exempt organization under the Internal Revenue Service tax code. Executive Editor: Gene Wurth; Managing Editor: Ted Katsinas; Editor: Amy Kile; Please direct comments about this publication to communications@oref.org

Throughout the recent AAOS Annual Meeting, we celebrated OREF's 50th Anniversary. The Shands Circle Gala (please see page 4) was a milestone event in OREF's history as nearly 320 guests celebrated OREF's accomplishments at a black tie-optional Gala in a spectacular setting.

2005 Board of Trustees – Executive Committee

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It has been my good fortune to fulfill many roles during my career – surgeon, teacher, author, consultant – and now I have been asked to take on a new role. On February 22, 2005, I became the new Chairman of the OREF Board of Trustees. It is one of the distinct honors of my career, and I am eagerly looking forward to it.

OREF has accomplished a great deal in its 50 years. Although this is an exciting time for us to celebrate our accomplishments, we need to maintain a keen eye on significant challenges that lay ahead.

■ **Developing stronger ties with the American Academy of Orthopaedic Surgeons (AAOS).** AAOS and OREF have a long history, beginning with the committee that formed OREF under the leadership of **Alfred R. Shands Jr., M.D.** I enjoyed serving as the AAOS President in 1984, and I am very interested in working with the Academy in my new role at OREF. Our primary goal is to strengthen our specialty by collaborating to increase funding for research, and we can do this by involving more of the AAOS fellowship.

■ Under the direction of Chair-elect **John J. Callaghan, M.D.**, OREF has done a superb job in collaborating with industry on projects that survey physicians about practice patterns, fund resident research symposia and awards, or provide OREF with unrestricted revenue that allows us to fund clinically relevant research. OREF and industry need to be more creative to reach a higher level

If we don't fund that research, who knows what opportunities we will miss.

of support because government funding of orthopaedic research continues to wane.

If we do not partner to provide support for promising researchers, we cannot ensure those researchers will be there. If we don't fund that research, who knows what opportunities we will miss. This will be the challenge of **S. Terry Canale, M.D.**, our new vice-chair, Corporate Relations.

Building a more productive relationship with the AAOS, and working to continue to enhance industry support will help. But we need more than just the 15% of the Academy membership that has contributed to OREF in the last five years to join our cause. Please consider supporting OREF's 50th Anniversary by making a contribution to our 50th Anniversary Campaign.

Thank you for your support.

Charles A. Rockwood Jr., M.D.
Board Chairman



Charles A. Rockwood Jr., M.D.
2005 Board Chair

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2002 – USA – 2011

2005 Board of Trustees

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Joseph C. McCarthy, M.D.

Shands Circle Gala – Celebrating Our 50th In Style

Dinner, dancing, and music set the scene as we talked with old friends and met new ones, shared stories and enjoyed the fabulous setting of the Ronald Reagan Building and International Trade Center. It's no wonder so many people considered the Shands Circle Gala *the place to be* during the Academy's Annual Meeting.

The Reagan Building provided the perfect ambiance for the Gala, the invitation to which is one of the many benefits of belonging to the Shands Circle.

This year, nearly 320 members and their guests — a record turnout — attended the Gala, which is not surprising considering the near record-setting growth of the Shands Circle in 2004. Sixty-five members joined last year, making it the second-largest one-year total in the Shands Circle's 10-year history, bringing membership to more than 420.

The Shands Circle Gala began with a cocktail reception on the spectacular balcony prior to guests walking down dramatic staircases to the Atrium, which was appropriately adorned in gold with black highlights to commemorate OREF's golden anniversary.

A special feature of the Shands Circle Gala is the chance for our guests to plan their own seating arrangements. Members who would like to invite friends and guests to sit with them need only tell the OREF staff of their wishes, and that seating can be arranged. This is a great way to spend time with friends.

For the first time, Shands members contributed \$100 per person. This helped OREF defray costs of the celebration, thereby allowing us to fund more research.

After dining, both Nancy Hays' singing and, later, the band Rendezvous motivated Shands Circle members to dance. Everyone remained in high spirits throughout the night.

In addition to an invitation to the Shands Circle Gala, Shands Circle members also receive access to OREF's VIP Suite at the Annual Meeting, and priority reservations at preferred hotels.

Thank you to everyone who joined the Shands Circle last year. For those considering membership, please join soon to receive an invitation to the 2006 Shands Circle Gala, which once again figures to be *the place to be* at the Academy's Annual Meeting.

Sincerely,

Joseph C. McCarthy, M.D.
Chair, Shands Circle Committee



To learn how to join the Shands Circle, or for more information on how to make contributions toward the 2006 Shands Gala, please contact:

Gene Wurth,
President and CEO
at (847) 384-4362
or wurth@oref.org
or **Robin Mueller**,
Coordinator, Shands
Circle at (847) 384-4358
or mueller@oref.org.



Corporate Associates Program

We would like to thank our 2004 Corporate Associates:

OREF is proud to acknowledge these distinguished companies for their generous support. A strong and productive alliance with industry enables OREF to fund quality programs and projects that bring about significant advances in the orthopaedic profession, ultimately leading to improved patient care.

Diamond Level (\$200,000 or more)



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To learn more about the Corporate Associates Program, please contact **Judy Sherr**, VP, Corporate Relations, at (847) 384-4356 or sherr@oref.org or **Jackie Opel**, Coordinator, Corporate Relations, at (847) 384-4350 or opel@oref.org.



Charitable Remainder Trusts provide a beneficial means to support OREF

While planning his estate, **Scott F. Holder, M.D.**, a general orthopaedic surgeon, decided to make a large gift to OREF through a charitable remainder trust (CRT).

With this first-time gift, Dr. Holder became part of OREF's Alfred R. Shands Jr. Circle. The Shands Circle is OREF's high-recognition society for donors who have contributed \$20,000 or more in cash gifts or \$50,000 or more in deferred gifts such as bequests, insurance policies, and trusts.

With a CRT, a stream of the income can be paid to beneficiaries over a period of years, or during the life of the donor and/or spouse. Then, at the end of the trust term, the remaining balance of the trust goes to a charitable organization, such as OREF. A percentage of Dr. Holder's CRT will be set aside for OREF, an estimated total gift of \$125,000. *(For more information about CRTs please see page 7, Charitable Remainder Trusts: You Can Give and Receive.)*

Dr. Holder cited the benefits as his reason for making his gift in the form of a CRT. "I decided to give my gift as a CRT because it allows me to use some of the interest from the trust for retirement income. In addition, the trust is free of estate taxes and protected from creditors. I also have the satisfaction of knowing that the money in the

trust will go to the charities of my choice at the time of my death," he said.

There were many reasons why Dr. Holder chose OREF as one of the charitable organizations for his CRT. "I'm at a time in my life that I can reflect on my last 25 years in orthopaedics, and I feel privileged and blessed for the many opportunities I've had, such as being accepted into medical school and finding orthopaedics as a career. I wanted to give something back to orthopaedics, and I know the active role OREF plays in the specialty."

This large gift to OREF is Dr. Holder's first, but, beyond simply choosing a charitable orthopaedic organization, Dr. Holder decided specifically to make his gift to OREF because of his desire to fund research that will have a positive impact on his specialty and on patient care.

"Although I'd never been involved with OREF before, it is my impression that the Foundation tries to involve surgeons on a clinical basis. Both academic and clinical studies are important, but I think OREF's strength is that it focuses on the practical application of the research it funds. OREF tries to find surgeons who are conducting clinical studies, that, although they take time, ultimately benefit surgeons," he said.

Dr. Holder supports research because he has come to appreciate the many innovations physicians and researchers have made in the years he's been in the orthopaedic profession.

"We've seen knee replacements, for example, evolve over the last 25 years, and that evolution is due to research. Research makes certain aspects of the practice possible. Outcomes of surgery have vastly improved since I started my career in 1980," he said.

Dr. Holder, whose emphasis is on total joint replacement surgery, said that the predictability and success of that form of treatment has been because of techniques that have been improved due to research and education of surgeons.

"All of these developments improve my success as an orthopaedic surgeon. My goal is to have a happy post-operative patient, and with the innovations that result from orthopaedic research, this is more likely to occur – which also makes my practice more enjoyable," he said.

By creating a CRT, Dr. Holder said, he feels reassured knowing that he has provided for income in his retirement, and will have the satisfaction of making a contribution to charity at the time of his death.



Dr. and Mrs. Scott F. Holder

"My goal is to have a happy post-operative patient and with the innovations that result from orthopaedic research, this is more likely to occur, which also makes my practice more enjoyable."

Charitable Remainder Trusts: You Can Give and Receive

To help ensure the future of OREF's services and programs, many supporters include us in their estate plans with life income gifts like charitable remainder trusts. These trusts offer benefits that include income for life or a term of years, an immediate income tax deduction, and avoidance of capital gains taxes.

Cash, securities, real estate, or other appreciated property may be used to fund charitable remainder trusts. One of the best choices, though, is highly appreciated, low-yield stocks. By transferring these securities to a trust, you receive all the benefits of a trust plus estate tax and capital gains tax savings.

A trust arrangement gives you a great deal of flexibility. You are able to choose the number of beneficiaries, specify the terms of the trust, and provide for one or more income recipients. The true value of the trusts, however, is that they allow you to make a larger gift to OREF than you might have ever imagined.

Charitable Remainder Annuity Trust

A charitable remainder annuity trust (CRAT) pays a fixed dollar amount each year to the income beneficiaries, based on the value of the assets at the time the trust is created. The annual

payout is typically 5% to 7%, so this type of trust is particularly well-suited to retirees who would like to support OREF while receiving a yearly boost to their retirement income. Most appreciated assets can be transferred into tax-exempt charitable remainder annuity trusts without being subject to capital gains taxes.

Charitable Remainder Unitrust

A charitable remainder unitrust (CRUT) pays a fixed percentage of the fair market value of the trust, with that value adjusted annually. Since the payment amount is determined each year, you or your beneficiaries can benefit from growth in the trust—potentially offering a hedge against inflation in your retirement years. Many of the other benefits of a CRUT are the same as for a CRAT. With a CRUT, you can contribute additional assets and receive an additional income tax charitable deduction, as well as increase your annual income.

Please consult your attorney or a financial advisor for additional information on charitable remainder trusts and other life income gifts — and help OREF fulfill its mission.

With Our Compliments

Low interest rates and an unstable market may have you looking for a secure income supplement. Look no further.

*For our free brochure, *The Charitable Remainder Trust: A Versatile Gift That Pays You Income for Life*, or for more information about charitable remainder trusts or about becoming a part of OREF's Shands Circle, please contact: **Gene Wurth**, President and CEO at (847) 384-4362 or wurth@oref.org or **Robin Mueller**, Coordinator, Shands Circle at (847) 384-4358 or mueller@oref.org.*

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Doctors study untreated scoliosis patients to learn prognosis of those who are treated

More than ever before, doctors are able to provide care for medical conditions that were once regarded untreatable. But how do they know if these treatments are worth the time, effort and risks?

"No matter what the disease or condition is, if you don't know how patients do if no treatment is offered, then you have no idea what the treatments you recommend to patients will alter or change," said **Stuart L. Weinstein, M.D.**, president of the American Academy of Orthopaedic Surgeons and current Ignacio V. Ponseti Chair and professor of Orthopaedic Surgery at the University of Iowa. "In other words, if nothing bad happens as a result of having a condition or disease, then that condition or disease needs no treatment."

Dr. Weinstein, who received a research grant from OREF in 1991 and an OREF Kappa Delta Clinical Award in 1998, employed his OREF funding to find out how untreated conditions affect the patient.

"I received an OREF grant to study the long-term natural history follow-up of patients with untreated adolescent idiopathic scoliosis," said Dr. Weinstein. "This study allowed us to present

a 50-year follow-up of untreated patients with this disease. It gives physicians treating scoliosis a better idea of the disease's effect on survival, pulmonary function, back pain, and curve progression."

Dr. Weinstein's study investigated the cosmetic aspects of the disease, such as how patients felt about having scoliosis and how it affected their lives. It also studied how much pain they endured, whether it affected their ability to have children, their ability to work or their ability to participate in activities of daily living. In addition, Dr. Weinstein and his research team looked at how the chest deformity usually associated with scoliosis affected the patients' lung function and if it shortened their life expectancies.

"This study gives surgeons a clearer idea of what they hope to prevent, and it helps determine which patients should have surgery, and which will be fine without it," said Dr. Weinstein. "In the future researchers will be able to see if over the long-term patient lives are indeed improved by comparing surgically treated patients to the untreated patients we reported on."



The results of the study were published in an article entitled "Health and Function of Patients with Untreated Idiopathic Scoliosis: A 50-year Natural History Study" in the March 5, 2003 issue of the *Journal of the American Medical Association*.

Dr. Weinstein said that the investigation will help orthopaedic surgeons, as well as other medical personnel, to help patients diagnosed with late onset idiopathic scoliosis.

"Most children and their parents are alarmed when the diagnosis of late onset — adolescent idiopathic — scoliosis is suggested based on sports or annual physicals, or during a school screening. This study gives orthopaedic surgeons, and all physicians who see patients with late onset scoliosis — family practitioners, pediatricians and internists — a solid foundation from which to advise their patients who've been diagnosed with this disease."

Dr. Weinstein stresses the importance of studying follow-up of untreated diseases. According to Dr. Weinstein, knowing how diseases affect patients when left untreated can aid in developing treatments to prevent or diminish adverse outcomes. Funding for this type of research, he said, however, is difficult to obtain, and he appreciates OREF's support.

"Clinical research on fundamental problems such as natural history, long-term follow-up, and outcomes of conditions is very expensive and funding sources are few and far between," said Dr. Weinstein. "The funding for this particular project would have been unavailable from any other source, and I am grateful to OREF for funding this endeavor and providing orthopaedic surgeons worldwide the fundamental information about the natural history of adolescent idiopathic scoliosis required to make sound treatment decisions."

Contributions to OREF's Anniversary Campaign can be used to support current research, such as that conducted by Dr. Weinstein. To contribute to OREF's Anniversary Campaign, please fill out the donor form on page 15 of this issue of *Impact* or for more information please contact: **Ed Hoover** at hoover@oref.org or (847) 384-4354, or **Maria Aguirre** at aguirre@oref.org or (847) 384-4357



(from left) James Urbaniak, M.D., and Mrs. Muff Urbaniak with Mrs. Lynn Weinstein and AAOS President Stuart L. Weinstein, M.D. at the Shands Gala.

"This study gives surgeons a clearer idea of what they hope to prevent, and it helps determine which patients should have surgery, and which will be fine without it."

Study could lead to ACL injury prevention for female athletes

In recent years, health care professionals have seen a trend with knee injuries; more female athletes injure their knees than males. What could be the cause of this trend? **James R. Slauterbeck, M.D.** aims to find out.

"I think there are many factors that cause female athletes to tear their anterior cruciate ligament (ACL) more than males, and many of them will likely interplay together to be the actual reason why females are more at risk," he said.

Dr. Slauterbeck, currently an associate professor at the University of Vermont, first saw this trend while completing a two-year sports medicine fellowship at the University of California, Los Angeles.

"During those two years, we were beginning to identify that our female soccer players were tearing their ACLs at a much higher rate than players from the male team."

Wondering if this phenomenon held true in other sports programs, Dr. Slauterbeck conducted an informal survey across the National Collegiate Athletic Association (NCAA) to determine the incidence of ACL tears among females. The survey results identified a sex difference in ACL injury among some college teams.

At that time a formal study conducted by **Elizabeth Arendt, M.D.**, director of sports medicine at the University of Minnesota, Minneapolis, and **Randall Dick**, associate director of research for the NCAA, showed similar results.

"The results of these studies made us question why this occurs," said Dr.

Slauterbeck. With a Research Grant he received in 1999 and the Clinician Scientist Award he received in 2004, both funded through OREF, he decided to conduct further research on this issue.

Dr. Slauterbeck was one of three clinician scientists to receive an OREF Clinician Scientist Award in 2004. Funded by the **Dr. Dane** and **Mrs. Mary Louise Miller** Endowment Fund, Dr. Slauterbeck's award is providing him with a \$100,000 per year salary stipend for three years.

"There are so many clinical demands on a surgeon or on a clinician today to support the medical school, to support the clinics and to support the running of the departments," he said. "This award has very effectively reimbursed the school for my academic time so that I can actually go to the lab and be freed up from clinical responsibilities."

This will allow him to continue investigating why injuries occur more often to female ACLs than male.

According to Dr. Slauterbeck, both extrinsic factors, such as coaching differences, playing surface differences, and fatigue, as well as intrinsic factors, including knee position, sex hormones and neuromuscular characteristics, probably share the responsibility for the higher incidence of ACL tears among female athletes. Dr. Slauterbeck's study will focus on the intrinsic aspects.

"One of the theories I'm investigating is that there are differences between males and females in the way ligaments remodel," he said.

"I think there are many factors that cause female athletes to tear their anterior cruciate ligament (ACL) more than males, and many of them will likely interplay together to be the actual reason why females are more at risk."

Remodeling, Dr. Slauterbeck says, occurs throughout everyday life as well as in response to injury. For ligaments, remodeling is a delicate balance of building up and breaking down collagen.

To study how this differs between females and males, Dr. Slauterbeck, along with **Daniel Hardy, Ph.D.**, an associate professor of cell biology and biochemistry at Texas Tech University with whom Dr. Slauterbeck has an NIH grant, has begun to perform experiments to find out whether the genes that encode for synthesis and breakdown of collagen are up-regulated (increased) or down regulated (decreased) in females.

LifeGift, a not-for-profit organ procurement organization dedicated to recovering organs and tissue for individuals needing transplants in West Texas and much of the United States, permits Drs. Slauterbeck and Hardy to

use ACLs from younger individuals. Gene expression analyses allow them to study the genes and the amount of protein being produced.

Using real-time polymerase chain reaction (PCR), a process by which Drs. Slauterbeck and Hardy are able to quantify the actual numbers of genes expressed in their ligament samples, has enabled them to find the genes expressed in uninjured male ligaments versus those present in uninjured female ligaments.

"What we actually do is quantify mRNA (messenger RNA) with real-time PCR to find the actual numbers of genes that are being expressed in each of our ligament samples," said Dr. Slauterbeck. "What we are finding is that genes that encode for collagen degradation are up-regulated, or increased in females and down-regulated or decreased in males."

They have also found that an enzyme, matrix metalloproteinase 3 (MMP3) — also called stromelysin — that is responsible for collagen breakdown is increased in females.

According to Dr. Slauterbeck, the mere presence of genes does not mean they are "turned-on," leading him to employ the Western Blot method to see if the proteins responsible for collagen synthesis are also present. He's found that there is a high correlation between the amount of genes encoding proteins and the proteins that they are specifically producing.

The next step will be to perform gene arrays. Because the human genome has been fully identified, unknown genes can be compared to known genes, allowing

Drs. Slauterbeck and Hardy to select about 1,000 genes and map what those particular genes are doing in each sample.

"What that will do is allow us to assess many more genes for each experiment," said Dr. Slauterbeck. "And we'll most likely use the gene array technique to place ACL tissue in culture and manipulate hormonal situations. We'll be able to find out how the ligament responds to hormonal differences."

This, Dr. Slauterbeck hopes, will lead to a reasonable explanation for why female athletes tear their ACLs more often than males. Although it's too soon to tell how, Dr. Slauterbeck hopes to translate these findings to clinical cases.

"If you know what is happening at the cellular level, it is much easier to begin to explain how to treat or prevent ACL injuries," he said. "With this information you might be able to maximize how ligaments remodel, such as through diet or nutrition or some other way to prevent injuries, but we won't know until we find out what the problem is."

Dr. Slauterbeck is also studying other possible intrinsic causes for the higher rate of female ACL tears in collaboration with **Javad Hashemi, Ph.D.** at Texas Tech University Department of Mechanical Engineering. They are employing digital photography and 3-D reconstructions of actual ligaments of males and females of similar size and age to study size differences of the ACL. Although Dr. Slauterbeck says that more work needs to be completed in this area, his initial data show that female ligaments are smaller

in area and volume than a similarly sized male's ACL.

In addition, Dr. Slauterbeck is working with **Tim Hewett, Ph.D.**, director of the Sports Medicine Biodynamics Center at Cincinnati Children's Hospital Medical Center, to develop a simple screening test to identify the sex differences in neuromuscular control between males and females at the time of puberty. They hope to use the screening test to identify which boys or girls might be at risk for sustaining a knee injury and then teach the athletes a neuromuscular training program to decrease the ACL injury risk.

"Females have different neuromuscular characteristics — they tend to fire their quadriceps when they land more than their hamstring muscles," Dr. Slauterbeck said. "The hamstrings protect the ACL because they're pulling the leg back, keeping it from moving forward.

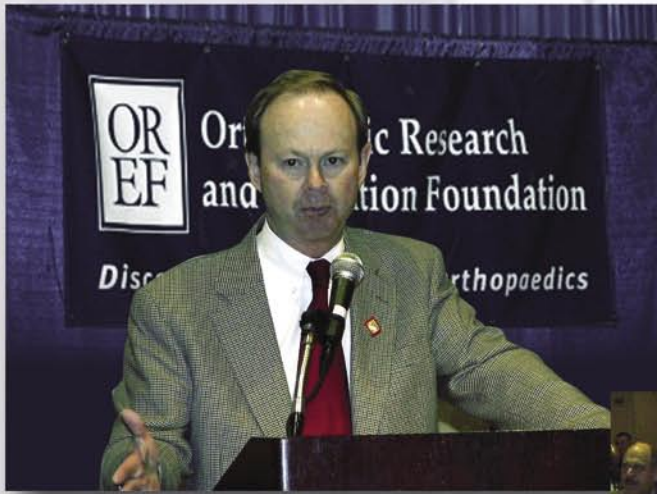
(continued on page 14)



*James R. Slauterbeck, M.D.
measures knee laxity on a test patient*

2005 Annual Meeting

Mike Magee, M.D., Director of Pfizer Medical Humanities Initiative and Vice President, Science and Medical Advocacy of Pfizer Inc., spoke on the Physician as Social Leader at OREF's Recognition Luncheon.



At the OREF Leadership Breakfast Chair-Elect and 2004 Vice Chair, Corporate Relations Dr. John J. Callaghan (right) presents James E. Gerry, President, and Steven A. Schwartz, Senior Vice President, Synthes USA, with a plaque recognizing their Diamond Level support.



(Above) More than 200 past trustees and grant recipients were honored during OREF's 50th Anniversary Recognition Luncheon sponsored by Pfizer Medical Humanities Initiative.



Dr. Anthony DiGioia and Dr. Hollis Potter, two speakers at the OREF Symposia, answer questions from the audience.

(Below) OREF's committed industry colleagues took advantage of the Leadership Breakfast, held at the Renaissance Hotel, to network with distinguished OREF grant recipients and orthopaedic opinion leaders.



Dr. Alexander Ghanayem (far left), a member of OREF's Corporate Relations Committee and OREF Treasurer, Dr. Courtney W. Brown (far right), thank Kyphon for its Platinum level support by posing with Co-Founder and Executive Vice President Karen Talmadge, Ph.D. and Vice President, Emerging Technologies Avram Edidin, Ph.D.

OREF Vice Chair, Corporate Relations Dr. S. Terry Canale (left) and OREF Board Chair Dr. Charles A. Rockwood Jr. (right) pose at the Smith & Nephew exhibit with Dave Illingworth, President, Smith & Nephew Orthopaedics - an OREF Diamond Level Corporate Associate.





From left: Dr. Jeffrey and Tracie Dugas; Dr. James and Mrs. Jenelle Andrews; and Dr. Lyle Cain with wife Jill Cain pose for a portrait before being seated for dinner at the Shands Circle Gala.



Nancy Hays and the band Rendezvous entertain guests at the Shands Circle Gala.



OREF Board Chairman Dr. Charles Rockwood Jr. (left) thanks Dr. Tom Price, the first orthopaedist to serve as a U.S. congressman, for taking the time to speak at OREF's Shands Circle Gala.



Orthopaedic surgeons gathered to listen to and discuss OREF's symposia "The Future of Orthopaedics: Advances that will Affect How Care Is Provided." Symposia topics included: nanotechnology, genomics, targeted delivery systems of pharmaceuticals, computer assisted surgeries, and use of computer technology in surgical training and imaging technology.



The Reagan Building provided the perfect ambiance for the Shands Gala, with the dining room appropriately adorned in gold with black highlights to commemorate OREF's golden anniversary.



Dr. Dianne Nguyen and Dr. Emmett McEleney enjoy dancing during the Shands Gala.



Leave Your Legacy - Endow a Named OREF Research Award

The goal of the 50th Anniversary Endowment Campaign is to permanently endow several research awards. This chart illustrates the amounts needed to permanently endow some of our research awards and grants. For more information on how you can endow OREF grants and awards, please contact **Gene Wurth** at wurth@oref.org or (847) 384-4362.

If you don't have the means to endow an award at this time, please consider a contribution to OREF's 50th Anniversary Campaign by completing the form on the following page.

Research Grant/Award	Description	Annual Amount Awarded	Funding Commitment to Endow
OREF Clinician Scientist Award	This award encourages young orthopaedic surgeons to pursue a career as a clinician scientist, someone who wants to pursue a career in research while remaining in clinical practice.	\$100,000 for each of three years	\$2 Million
OREF Career Development Award	This award encourages a multi-year commitment to scientific research in orthopaedic surgery.	\$100,000 for each of three years	\$2 Million
OREF Prospective Clinical Research Grant	This award funds promising prospective clinical research projects.	\$50,000 for each of three years	\$1 Million
OREF Research Grant	This award recognizes outstanding clinical research related to musculoskeletal disease or injury.	\$50,000 for each of two years	\$1 Million
OREF Resident Research Award	This award encourages development of an interest in research for residents and orthopaedic fellows.	\$25,000 for one year	\$500,000

Study could lead to ACL injury prevention for female athletes

(continued from page 11)

In contrast, quadriceps pulls the leg forward, which increases the force on the anterior cruciate ligament."

This, he believes, is possibly another reason why females injure their ACLs at a higher rate than males, and these findings encouraged Dr. Hewett to develop strength training programs that teach female athletes to jump and land properly, decreasing their risk of injury.

Dr. Slauterbeck said that he appreciates the Clinician Scientist Award because it will enable him to work more closely with Dr. Hardy to collect data that can be used to obtain another NIH grant to allow him to complete his research

"The opportunity to spend two full days a week in the lab is probably the most important thing that the Clinician Scientist Award has done for me," he said. "It's given me a much greater appreciation for my collaboration with Dan Hardy. His basic science knowledge and my surgical and sports medicine knowledge together have created a team more valuable than either of us working alone."

With this collaboration, perhaps the risk of knee injuries could be reduced for female athletes, allowing them to continue playing the sports they enjoy.



"OREF's support of research and education is critical to enhance patient care, given the decline in federal research funds. OREF helps bring new science to the bedside. As such, I am pleased to support OREF's 50th Anniversary Campaign with a generous contribution."



— Mary I. O'Connor, M.D.
Jacksonville, Florida

"From research on the molecules controlling bone formation to studies of the longevity of bearing surfaces, OREF is answering questions that will speed healing and avoid complications from our care. I am interested in contributing an extra \$2,000 to the 50th Anniversary Campaign."



— Robert S. Block, M.D.
Bennington, Vermont

"My justification for contributing to OREF annually, on a special basis, and in my will is to ensure the future of our profession. I am pleased to make a \$1,500 contribution to the 50th Anniversary Campaign."



— Shepard R. Hurwitz, M.D.
Charlottesville, Virginia

50th Anniversary Premiums for a Gift of:

- \$250 to \$1000: a 50th Anniversary OREF pen
- Over \$1,000: the pen and a 50th Anniversary portfolio
- \$2,000 & Above: the pen, the portfolio, and a 50th Anniversary OREF microfiber shirt

Your Anniversary Campaign gift is an unrestricted contribution above and beyond your annual campaign contribution. You can make a 1-year commitment or a 3-year pledge in support of OREF's 50th Anniversary Campaign. After September 1, 2005, OREF donors will be asked to make their regular contributions to the 2005 Annual Campaign, and they will have the opportunity then to designate a portion of an Order of Merit contribution to one of the specialty organizations that partner with OREF. For further information, please contact Ed Hoover, Director, Annual Giving at (847) 384-4354 or hoover@oref.org.

Please complete the form below to support OREF's 50th Anniversary Campaign!

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- Enclosed is my check for the 2005 OREF Anniversary Campaign in the amount of \$ _____
- I would like to pledge \$ _____ to OREF's 50th Anniversary Campaign. **I understand that it is an unrestricted amount above the Annual Campaign.**
- I would like to make a 3-year pledge of \$ _____ for 2005, 2006 and 2007.
- Charge my contribution of \$ _____ to my: Visa Mastercard AMEX

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For more information, please contact Ed Hoover at:
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Discovering the Future of Orthopaedics

*New OREF / Ortho Biotech Research Grant in Blood Management and
the OREF/ Ortho Biotech Award for Excellence in Blood Management Research*

OREF/Ortho Biotech Research Grant

OREF is pleased to announce a new \$40,000 one-year clinical research grant to be awarded on the topic of *The Role of Blood Management and Treatment of Anemia in Improving Outcomes in Orthopaedic Surgery Patients*.

The grant will be awarded to an orthopaedic surgeon working at an institution in the United States who has not received an NIH R01 grant or equivalent. The study will investigate whether the use of Epoetin alfa will:

- *Improve wound healing* • *Reduce complications (morbidity)* • *Decrease length of hospital stay* • *Reduce costs*

Applications will be available beginning April 15th and deadline for submission is June 30th. For the RFA, please log on to www.oref.org starting April 15th. To receive the application, please contact **Mary Marino** at (847) 384-4359 or marino@oref.org. Address questions to **Jean McGuire** at mcguire@oref.org, or (847) 384-4348.

OREF/ Ortho Biotech Award for Excellence in Blood Management Research

OREF is also soliciting manuscripts of a clinical nature that describe a significant body of completed research that advances a better understanding of the utility and value of blood management. The top-rated manuscript will win a \$20,000 award.

For submission instructions, please visit www.oref.org after April 15th.



Orthopaedic Research
and Education Foundation

ORTHO BIOTECH

