



In Memoriam

All of us are saddened to learn of Dr. Bill Tipton's passing. At his family's request, in memoriam contributions may be sent to OREF.

# IMPACT



Orthopaedic Research  
and Education Foundation

VOLUME VII

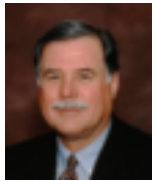
SUMMER 2005

NO. 2

## OREF-funded Study Led to Lifesaving Procedures in Total Hip Replacement

Throughout its history, OREF-funded research has enhanced clinical care, which leads to improved health, increased activity, and a better quality of life for patients. The following research topics are just some examples of the advancements in patient care that OREF funding has helped to provide.

*An OREF-funded study by Dr. James Herndon led to development of procedures that greatly reduced fatalities from the fat embolism syndrome by preventing fat and bone marrow emboli from entering the lungs and causing cardiovascular system collapse.*



**James H. Herndon, M.D.,**

1970 Research Grant recipient

**Topic:** Showed that fat embolism occurred

with fractures, and to some extent with every total hip replacement, which led to new precautions to avoid patient fatality.

**Results:** Initially, high dose steroids given to fracture patients with severe adult respiratory distress syndrome were shown to save otherwise terminal patients. Eventually, the study led to other procedures to combat this problem, including earlier detection for fracture patients. It also led to femur venting during insertion of the cement and femoral component and today's accepted treatment of plugging the femur below the prosthesis for hip replacement patients. This has greatly minimized the problem of fat embolism after total hip replacement.



**For more practical applications of OREF-funded research, please see page 6.**



Charles A. Rockwood Jr., M.D.

As OREF celebrates its accomplishments of the past 50 years, I would like to imagine what the next 50 years and beyond will mean for the Foundation.

The cover story of this issue of *Impact* highlights some of the achievements OREF has made since it was founded by Alfred R. Shands Jr. and several other orthopaedists in 1955. Each achievement has in some way had a positive impact on patient care. In addition to those research projects featured in the cover story, OREF has funded many other grants and awards that also have the potential to improve patient outcomes. Some of these potential patient applications include:

*Improved outcome (healing) for older children and adults who have suffered ischemic hip injuries.*

*Treatment that prevents tumor growth and increases a patient's chances of surviving cancer.*

*Care that's right for each individual patient, lessening the pain and complications of spinal maladies with minimal risks.*

It is largely unrestricted giving that allows OREF to fund many of these projects. Without those unrestricted gifts, we might miss opportunities to fund research that could ultimately lead to better patient care and a better quality of life.

To help ensure that better patient care can be achieved, OREF's 50th Anniversary Capital Campaign is striving to raise \$100 million to permanently endow many research awards. A unique feature of this campaign is the chance to endow a named research award, which gives donors the chance to leave their personal legacies to orthopaedics. For more information, please contact Gene Wurth, President/CEO, at wurth@oref.org or (847) 384-4362.

For those who do not have the means to endow an award, cash and pledge gifts also help OREF to fund current research. Please consider contributing to OREF's 50th Anniversary Capital Campaign by completing the form on page 7.

I thank everyone who has already made a contribution to OREF's 50th Anniversary Campaign. We truly appreciate your support.

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

About Impact

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*OREF has recently funded grants and awards that also have the potential to improve patient outcomes...*

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## A Charitable Lead Trust Offers Good News for Bad Markets

As it turns out, there is a way to take control of a bad-market situation and use it to your advantage. Recent declines in equity portfolio values may present some excellent opportunities for tactical estate and gift planning.

Consider the charitable lead trust (CLT). A donor transfers cash or assets, which are appreciating in value, into a trust with the intention of supporting a charitable organization, such as OREF, and then returning the assets to the family. It's a tool that helps preserve family wealth and control social capital.

The lead trust works well in a low-interest environment because the value of the remainder interest to heirs for gift tax purposes is decreased, allowing you to pass more to them for the same cost. The donor has a choice about using either a fixed dollar contribution (CLAT) or a fixed percentage contribution (CLUT) to meet the requirements for a qualified lead trust.

Is there any risk to creating a charitable lead annuity trust? If the CLT investments earn less than the government's charitable midterm federal rate (the interest rate used by the IRS to value the remainder interest in a gift), then the trust will produce a remainder significantly less than what was originally contributed. If the trust manager takes a long-term view and maintains a tax efficiently managed portfolio, though, the subsequent growth passes tax free to heirs.

Currently, with the government's low interest rate used in calculating the gift value and the stock market decline, a charitable lead annuity trust is an excellent planning tool. Please contact your financial advisor or **Gene Wurth** at (847) 384-4362 for more information. To receive OREF's financial planning newsletter, *Forefront*, please contact **Robin Mueller** at mueller@oref.org or (847) 384-4358.

## Creative Ways to Contribute to OREF

For the past 10 years, **Joseph C. McCarthy, M.D.**



has been an active supporter of OREF, and within the last five years, he found a creative way to contribute to OREF's goal of funding research that ultimately enhances patient care.

"I realized that I had the opportunity to join the Shands Circle and address OREF's need to fund research today by directing proceeds from a consulting arrangement with a device company to OREF," explained Dr. McCarthy. "This maneuver made sense for tax purposes, but more importantly, it helped OREF support young researchers whose efforts over time will improve the practice of our specialty. I'd encourage other surgeons to consider doing something similar."

Through the designation of residuals from the consulting arrangement, Dr. McCarthy joined OREF's highest-level recognition society, the Shands Circle, in 2000. To become a Shands member, contributors must make a minimum \$20,000 cash or stock commitment over a maximum of five years, or a minimum of \$50,000 in deferred giving arrangements.

Dr. McCarthy gave \$20,000 from his consulting arrangement in 2000 to become a Shands member. Even though that Shands commitment has now been fulfilled, he has continued to assign some of his residuals to OREF, but now he supports the Annual Campaign to fund current research. In 2004, he contributed \$5,000

(continued on page 6)

Detail of a Sample CLT Growth and Payout Over 20 Years

Year	Column 1	Column 2	Column 3	Column 4	Column 5
	Principal @ Start of Year	Income @ 7.5% Growth (split between payment to charity and addition to principal - columns 3 and 4)	Annual Payment to Charity	Addition to Principal	Principal at end of Year (Starting principal plus yearly additions to principal columns 1 and 4)
1	\$850,000	\$63,750	\$60,350	\$3,400	\$853,400
10	\$891,581	\$66,869	\$60,350	\$6,519	\$898,100
20	\$983,801	\$73,785	\$60,350	\$13,435	\$997,236
<b>Total for 20 years</b>		<b>\$1,354,236</b>	<b>\$1,207,000</b>	<b>\$147,236</b>	<b>\$997,236*</b>

\*Total amount available to heirs at end of 20 years – original principal plus additions to principal – column 4



## New Funding Commitments Align with PhRMA Code and AdvaMed Guidelines

We appreciate the support of all of our Corporate Associates, and we are pleased to make you aware of these recent commitments:

- Two-year Research Grant in the area of BMP-2, funding provided by **Medtronic Sofamor Danek**
- OREF's 50th Anniversary Special Recognition Luncheon Presentation: Physician as Social Leader, funding provided by the **Pfizer Medical Humanities Initiative**
- Multi-year Research Grant to study diversity-related issues established through a partnership between the R. J. Gladden Society and OREF, with funding provided by **DePuy, a Johnson & Johnson Company**
- OREF/Pfizer Fellowship Award in Pain Management, funding provided by **Pfizer Inc**
- OREF/Bayer Resident Research Award in blood management, funding provided by **Bayer Pharmaceuticals**
- OREF/Zimmer Career Development Awards in Total Joint Arthroplasty or Trauma, funding provided by **Zimmer**

OREF is pleased to offer partnership opportunities that align with the PhRMA Code and AdvaMed Guidelines. For a description of strategic programs available for your consideration, please contact **Judy Sherr** at sherr@oref.org or (847) 384-4356 or **Jackie Opel** at opel@oref.org or (847) 384-4350 for a Partnership Opportunities brochure.

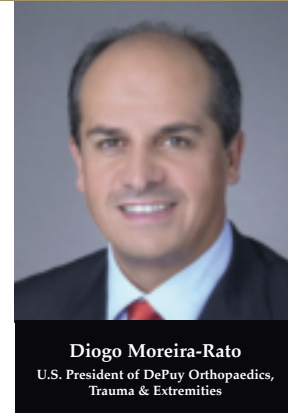
### DIAMOND LEVEL (\$200,000 OR MORE)



We would like thank our  
2004 Corporate Associates



## Diogo Moreira-Rato, U.S. President of DePuy Orthopaedics, Shares His Thoughts for the Future of the Specialty



**D**ePuy Orthopaedics, Inc., a Johnson & Johnson company, is committed to helping surgeons achieve excellence in surgical practice by designing, manufacturing, and distributing orthopaedic devices and supplies.

In its 100-year history, DePuy has developed many innovative products that accomplish objectives from eliminating the need for bone cement to matching implants to a patient's anatomy. Recently, **Diogo Moreira-Rato**, U.S. President, DePuy Orthopaedics, Trauma & Extremities, spent a few minutes with *Impact* to explain what he thinks the future holds for orthopaedics and why DePuy is committed to supporting OREF.

**Impact:** What role do you think OREF plays for orthopaedic surgeons and patients?

**Mr. Moreira-Rato:** OREF plays a critical role for the young investigator and in the early support and development of researchers from the clinical as well as academic research environment. We are sure that the outcomes of the research funded by OREF will eventually make their way into patient care as demonstrated by some of the projects awarded in past years.

**Impact:** What do you envision OREF's role being 10 years from now?

**Mr. Moreira-Rato:** We hope that as OREF continues to grow, it can find a way to incorporate the lay public into supporting and generously giving to its research and educational goals. This would bring new resources and additional funding to the arena of broader-based research, not only for

career development awards and entry-level sponsorship of research, but also for major programs to fund discovery of and eventual treatments for orthopaedic disease and injury.

**Impact:** What do you think is OREF's single strongest asset?

**Mr. Moreira-Rato:** We believe that OREF's Board of Trustees, lay volunteers from the orthopaedic community and staff are its strongest assets, bringing the highest standards and qualities to the organization by working with the leaders of the orthopaedic community. The quality of the research programs funded and the outcomes from that research are direct and visible results of this type of leadership and involvement.

**Impact:** What would you say to persuade a colleague in the orthopaedic device industry to support OREF?

**Mr. Moreira-Rato:** The quality of the work OREF funds is at the highest level of academic value. In our era of healthcare compliance and strict guidelines for behavior, the OREF provides a unique opportunity to avoid all issues of unethical behavior by placing the burden of distribution of funds in the hands of capable, independent reviewers and the OREF leadership staff.

**Impact:** How do you think OREF could enhance collaboration with the orthopaedic device industry?

**Mr. Moreira-Rato:** An additional opportunity to enhance collaboration would be to educate the general lay public in the goals and aspirations of the orthopaedic community and provide knowledge about orthopaedic care and treatment not currently available or known. This would provide a means of expanding the role of education for OREF and encourage general orthopaedic education through national programs made available by OREF.

**Impact:** Is there anything you would like to add?

**Mr. Moreira-Rato:** Our involvement on the Board has been rewarding, both in providing leadership and guidance to the organization as well as in working with many of the key leaders in the orthopaedic community. We would like to thank the OREF for growing to a nationally recognized organization and for its high goals and standards in transforming orthopaedic care.





## OREF-funded Research Led to Improvements to Rotator Cuff and Knee Surgeries Among Many Other Practical Applications *(continued from page 1)*

**Marshall R. Urist, M.D.,**

1963 & 1967 Research Grant recipient

**Topic:** Studied the calcium binding capacity of proteins in the tendon and the effects of irradiation of bone matrix upon bone induction by bone implants

**Results:** Developed BMP.

**Patient Care Application of Results:**

Stimulation of bone growth, allowing for better fusions and total joint replacements.



**Evan Flatow, M.D.,**

1989 Career Development

Award recipient

**Topic:** Studied the mechanics and clinical outcomes of rotator

cuff repair. Resulting data was used to prospectively compare arthroscopic and open repair.

**Results:** Found that although many tendons did not heal, those that did heal had better strength and function, which encouraged others to develop improved repair methods.

**Patient Care Application of Results:**

*Better repair methods for rotator cuff injuries to possibly strengthen the tendon and prevent further injury.*



**Steven P. Arnoczky, D.V.M.,**

1984 Research Grant recipient

**Topic:** Investigated the feasibility of using

cadaver knee joint cartilage — menisci — to replace severely damaged menisci.

**Results:** Showed that frozen cadaver menisci could be transplanted and naturally incorporated into the knee joint, which has become a common surgical procedure, enhancing the quality of life for patients over the last 20 years.

**Patient Care Application of Results:**

*Replacement of bad knee joint cartilage with good cartilage, lessening pain and increasing mobility.*



**Joseph M. Lane, M.D.**

1975 & 1978 Research Grant recipient

**Topic:** Investigated the events that occur during fracture healing.

**Results:** Encouraged further studies to find ways to enhance fracture healing, including growth factors and systemic drugs. This in turn resulted in the critical development of BMPs and discovery of collagraft, a synthetic bone graft substitute.

**Patient Care Application of Results:**

*Fusions and prosthetic joints that function better over time.*

OREF began 2005 by kicking off its 50th Anniversary Capital Campaign. Introduced at the American Academy of Orthopaedic Surgeons' (AAOS) annual meeting in Washington, D.C., this campaign set an ambitious yet attainable goal of raising \$100 million in total

giving to add significantly to the OREF endowment.

While growth of the OREF endowment is critical for our long-term success, OREF welcomes cash contributions and short-term pledges to its 50th Anniversary Campaign. These contributions can be made by completing the form on page 7.

Those who make tax-deductible gifts in any amount to this campaign will be recognized at OREF exhibits at the 2006 and 2007 AAOS annual meetings, as well as in OREF annual reports, and on OREF's Web site, [www.oref.org](http://www.oref.org).

In addition to this recognition, depending on the level of their gifts, donors will receive premium incentives such as special 50th Anniversary pens, 50th Anniversary leather portfolios, and embroidered 50th Anniversary OREF microfiber long-sleeve shirts.

To date, OREF has raised more than \$55 million toward its goal. We are grateful to these donors for their generosity. By making these gifts, they are helping to ensure a strong future for orthopaedics. For more information on endowing OREF grants and awards please contact **Gene Wurth**, President/CEO at [wurth@oref.org](mailto:wurth@oref.org) or (847) 384-4362.



**50th Anniversary Campaign Commendatory Premium Incentives**

## Creative Ways to Contribute *(continued from page 3)*

to the Annual Campaign through this assignment, with the remainder, more than \$32,000, going to OREF's unrestricted endowment. Since 1996, Dr. McCarthy has contributed in excess of \$120,000 to OREF.

We salute Dr. McCarthy, who is now serving as the Chairman of the Shands Circle, for his commitment and

leadership, and we encourage others to consider creative ways to contribute to OREF, including Charitable Lead Trusts, which are described on page 3. For more information, please contact **Gene Wurth**, President/CEO at (847) 384-4362 or [wurth@oref.org](mailto:wurth@oref.org) or **Robin Mueller**, Coordinator, Shands Circle, at (847) 384-4358 or [mueller@oref.org](mailto:mueller@oref.org).



## Help Us Discover the Future of Orthopaedics

*"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](mailto:hoover@oref.org).

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

Name: \_\_\_\_\_

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Email: \_\_\_\_\_

For gifts of \$2,000 and above shirt size S M L XL XXL

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

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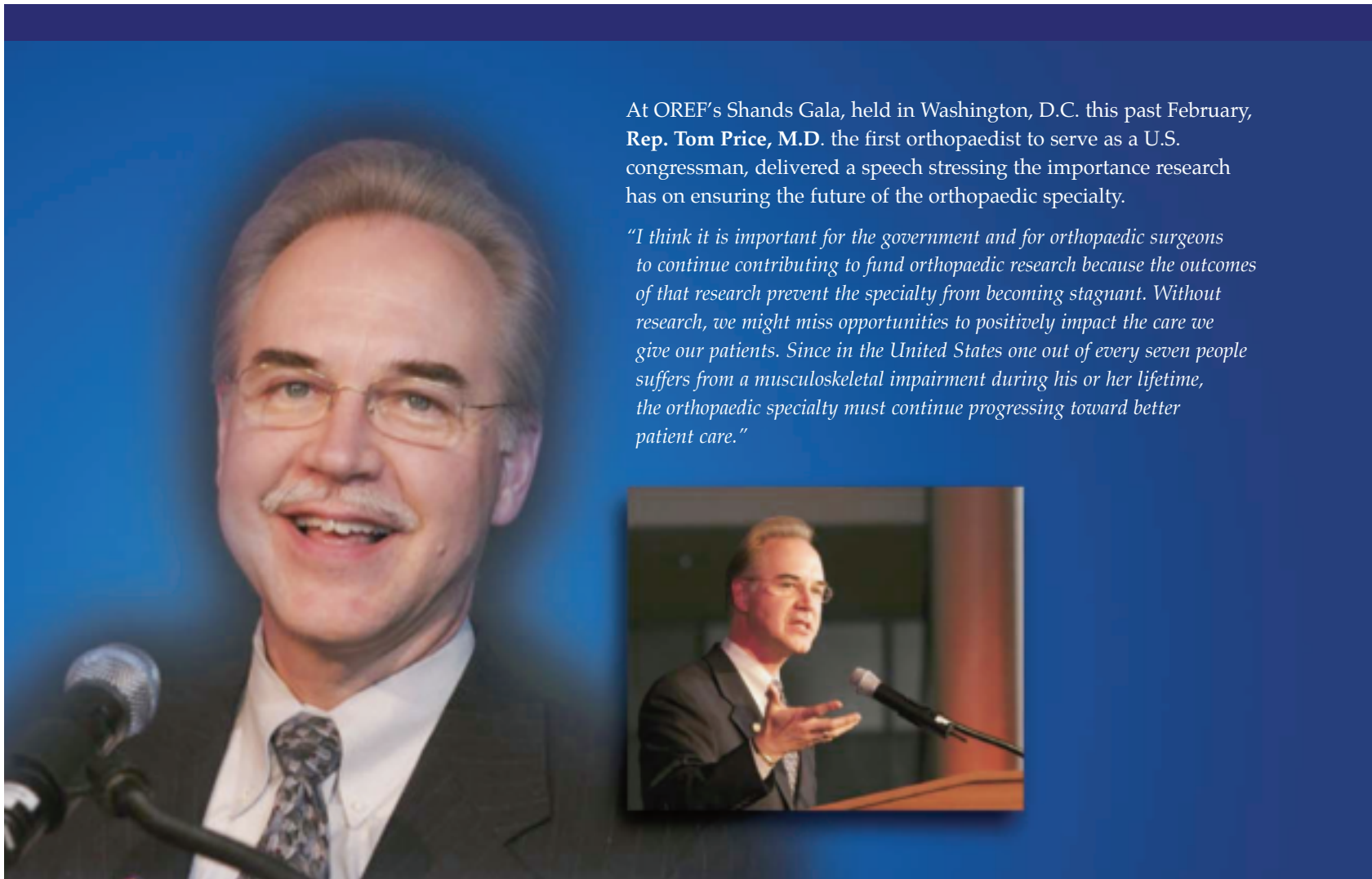
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*Discovering the Future of Orthopaedics*



At OREF's Shands Gala, held in Washington, D.C. this past February, **Rep. Tom Price, M.D.** the first orthopaedist to serve as a U.S. congressman, delivered a speech stressing the importance research has on ensuring the future of the orthopaedic specialty.

*"I think it is important for the government and for orthopaedic surgeons to continue contributing to fund orthopaedic research because the outcomes of that research prevent the specialty from becoming stagnant. Without research, we might miss opportunities to positively impact the care we give our patients. Since in the United States one out of every seven people suffers from a musculoskeletal impairment during his or her lifetime, the orthopaedic specialty must continue progressing toward better patient care."*