



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

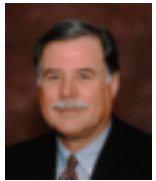
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## OREF-funded Study Led to Lifesaving Procedures in Total Hip Replacement

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.



**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.

*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.*



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



## 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).