



Miller Endowment provides support for multiple grants that improve patient care

Preventing bone loss in prosthetic patients, stabilizing wrist fractures, and verifying the economic value of orthopaedic treatments are just a few of the projects funded by the **Dr. Dane and Mrs. Mary Louise Miller** Endowment Fund through OREF. Since establishing the endowment in 1996, Dr. and Mrs. Miller have funded more than \$1.6 million through nine OREF grants to promising researchers.

“When we know how bone loss occurs over time, we’ll have a mechanism to understand how the various factors we might administer to orthopaedic implant patients can prevent that loss.”
— **Regis J. O’Keefe, M.D.**

patient care. This commitment is demonstrated through research conducted by the nine orthopaedic surgeons whose OREF grants were funded by the Dr. Dane and Mrs. Mary Louise Miller Endowment Fund. **Regis J. O’Keefe, M.D.**, a current OREF Board member, received the first of the Miller (continued on page 7)



Dr. Dane A. and Mrs. Mary Louise Miller

In this Issue

- Page 6 Dane A. Miller, Ph.D. discusses Biomet’s dedication to socially responsible health care
- Page 10 Henry J. Mankin M.D.’s basement houses keys to orthopaedic education
- Page 13 Orthopaedic Department Chairs tell why their institutions give

“We really believe in the mission of OREF. I had been close to orthopaedic research activities for many years, and knew that there were a lot of different organizations to which my wife and I could focus our support,” said **Dane A. Miller, Ph.D.**, president and CEO of **Biomet**, a company that produces orthopaedic devices. “OREF seemed to be serving as an umbrella organization that supports research both directly and through its support of other organizations, and I thought it was a good central depot for our charitable support. It appeared to be the best vehicle to give back something to the institution that allowed us to be successful.”

Dr. Miller is not only committed to improving the tools of the device industry, but also hopes to enhance





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

Great discoveries could be made with your support

Since 1955, OREF has funded more than 2,000 grants and awards which have led to advances in orthopaedic treatments, giving patients improved health, increased activity, and a better quality of life.

These advancements in care are a result of research. We are grateful to the corporations, such as **Biomet**, and to individuals such as **Dane and Mary Louise Miller**, who have made possible some of the grants and awards OREF has funded. There is still a need, however, for physicians to **contribute annually**.

Contributions made to the OREF Annual Campaign support research and educational grant applications in the next calendar year. Annual Campaign contributions have helped to support research such as:

Stephen B. Trippel, M.D.'s investigation of the mechanisms by which skeletal growth and development are regulated by growth factors. Dr. Trippel showed that some growth factors interact with each other, allowing them to achieve synergistic stimulation of growth plate cells. Because of this study and some additional research, the same growth factor used in the study is now used *to treat patients who suffer from deficient skeletal growth.*

Thomas E. Trumble, M.D.'s study of the use of nerve allograft in the treatment of nerve injuries, which resulted in *better techniques for bridging nerve defects after an injury to avoid the need for donor tissue, better identification of the type of nerve tissue that can be used for nerve regeneration, and a new point of reference that has helped advance the care for carpal tunnel surgery patients with less invasive techniques.*

In the last 10 years OREF's peer review committee has rated about 30% of the more

"Unfortunately, because of a lack of resources, we were only able to support about half of these."

than 1,000 received applications in the fundable range, meaning they were of sufficient quality to deserve support. Unfortunately, because of a lack of resources, we were only able to support about half of these. *What great discoveries will be missed if we do not provide more support for research in orthopaedics?* These discoveries can help all of us better fulfill our mission of improving patient care. Please consider a contribution to OREF's Annual Campaign to fund more applications. Contributions can be made by:

- Sending your check or credit card information with the form on page 15 of this issue of *Impact*
- Logging on to www.oref.org and clicking Donate Now
- Contacting **Ed Hoover**, Director, Annual Giving at hoover@oref.org (847) 384-4354 or **Maria Aguirre**, Development Coordinator, at aguirre@oref.org (847) 384-4357

Thank you for your support.

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

About Impact

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Corporate & OREF: Great opportunities for collaboration

OREF provides strategically-based opportunities that enable corporations to elevate their presence in the orthopaedic community. By becoming OREF Corporate Associates, companies demonstrate their leadership and commitment to the specialty with the shared goal being to improve patient care.

Since it began in 1995, OREF's **Corporate Associates Program (CAP)** has become an integral part of the overall funds raised. CAP now reflects about 40% of the funds raised annually, some of which may be dedicated to one of our 30 Designated Giving Partners, thereby streamlining corporate operations while optimizing corporate recognition opportunities.

OREF's relationship with each of its Corporate Associates is unique, and this issue of *Impact* features the ways in which **Biomet**, a highest-level (\$200,000 and above) Diamond Associate supports OREF. The feature story beginning on the front cover portrays how Biomet's President and CEO, **Dane Miller, Ph.D.**, and his wife, **Mrs. Mary Louise Miller**, started an endowment which has now funded nine researchers whose work has had notable impact on patient care.

Also in this issue, Dr. Miller explains Biomet's reasons for supporting OREF so strongly.

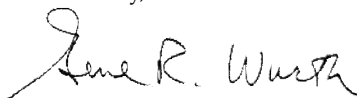
There are many ways OREF can collaborate with industry. Some collaborative opportunities include:

- Supporting named research grants and awards as part of OREF's annual grants cycle
- Funding OREF Resident Research Symposia or Grant Writing Workshops to help encourage young researchers
- Providing support for OREF publications that enhance the knowledge base of orthopaedists
- Directing funding through OREF's Designated Giving Program to 30 specialty societies
- Supporting special projects such as a peer-reviewed research project, a practice patterns survey, or a focus group to study a key issue, such as fragility fractures, through our directed research policy

All of these are great naming opportunities that will provide recognition to the sponsor and important support for OREF.

For additional collaboration opportunities or more information about OREF's Corporate Associates Program, please contact **Judy Sherr** at (847) 384-4356 or sherr@oref.org.

Sincerely,



Gene R. Wurth
President and CEO



Gene R. Wurth
President and CEO

"By becoming OREF Corporate Associates, companies demonstrate their leadership and commitment to the specialty with the shared goal being to improve patient care."

Bone and Joint
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Joseph C. McCarthy, M.D.
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Shands Circle FAQ

As 2005 nears its end, it's a good time to answer some questions about the Shands Circle, while looking forward to next year's events.

What is the Shands Circle and how many people are a part of it?

Started in 1994, the Shands Circle is the top OREF recognition society that includes individuals who support the OREF endowment program, ensuring permanent support for research. Today, the Shands Circle comprises 430 members whose contributions have a value of more than \$20 million in currently invested assets, and more than \$13 million in planned gift commitments. These commitments differ from annual gifts.

How does the Shands Circle relate to Annual Giving and the Order of Merit?

The Shands Circle is completely unique. Its focus is on permanent funds invested in our endowment — only the income from the endowment is used annually.

The Order of Merit is the recognition program for annual giving — gifts made in one year and distributed the next.

Both are critical to OREF achieving its goals of supporting the best research — and researchers — to *Discover the Future of Orthopaedics*.

What benefits do Shands Circle members receive?

- VIP housing at the AAOS Annual Meeting
- Invitations to OREF's annual *Shands Gala*, a black-tie optional dinner and reception. The 2006 gala will be held in Chicago on Thursday, March 23
- Access to OREF's exclusive *Shands Circle VIP Suite* at the AAOS Annual Meeting
- A gold lapel pin featuring the Shands Circle logo; spouses receive a diamond and gold pin featuring the Shands Circle logo
- Significant recognition at the AAOS Annual Meeting and through other vehicles, including OREF's publications

For more information about joining the Shands Circle, please visit us at www.oref.org or contact Maureen Corcoran at corcoran@oref.org or (847) 384-4360.



The 2006 Shands Gala will be held in Chicago on March 23



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 **Maureen Corcoran**, Director, Shands Circle Programs at (847) 384-4360
or corcoran@oref.org.

Discover the tax benefits of year-end giving

Now is the time to consider your year-end giving, and if you have additional income this year, perhaps from selling some investments, the time is especially good. Your tax planner may advise you to do some charitable tax planning before year-end to lower your taxable income. Please consider OREF when evaluating your options.

To reduce your taxable income this year, consider making a cash gift. Cash gifts are deductible up to 50 percent of your adjusted gross income. Gifts can be directed to a specific need — we'd be happy to provide details — or contributed to our general budget.

Another simple charitable gift to make before year-end is a gift of appreciated stock. Maybe you have stock you were contemplating selling but just haven't had the time to sell it. If so, instead of selling the stock and incurring potential capital gain income, donate the stock to OREF. OREF can sell the stock without the capital gains tax implications, and you receive a deduction equal to the value of the stock sold. The value of the stock is deductible to the extent that the stock's value doesn't exceed 30 percent of your adjusted gross income.

Alternatively, you might consider making a planned gift before year-end. Planned gifts can provide you with lifetime income and improve your tax situation.

Be sure to have the gift finalized and postmarked by midnight on Dec. 31 to count against this year's taxable income. If you prefer to make a gift with a credit card, you can deduct the gift in the year the charge is incurred — even if the bill is not paid until the following year. For planned gifts, be sure to have all the documents signed and implemented by the end of the year.

We can help you decide the best charitable gift for your situation. Please visit www.oref.org or contact **Gene Wurth** at (847) 384-4362 or wurth@oref.org for more information.

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To reduce your taxable income this year, please consider making a cash gift.





Biomet funding aims for socially responsible health care



Dane A. Miller, Ph.D.
Biomet President and CEO

Biom[®], Inc. and its subsidiaries design, manufacture, and market products used in both surgical and non-surgical therapy. Products produced by Biomet include orthopaedic joint replacement devices and bone cements; fixation products, such as electrical bone growth stimulators and internal and external orthopaedic fixation devices; bone substitute materials; spinal stimulation devices; spinal hardware and orthobiologics; as well as other products, such as arthroscopy and bracing products.

Biomet has been a major contributor to OREF for more than 21 years, providing more than \$1.6 million. *Impact* recently spoke to Biomet’s President and CEO, **Dane A. Miller, Ph.D.**, about why both he personally and Biomet as a company are so committed to funding orthopaedic research.

Impact: Why is Biomet so committed to supporting OREF?

Dr. Miller: I think that there are many reasons. First, as we look forward to the next two or three decades, we’re going to have many more orthopaedic patients — Baby Boomers in need of orthopaedic care — and we’re going to need to invent the technology that allows us to deliver that care for a lot less money. Ultimately, I think the good work of OREF-funded research will lead us down that pathway.

Second, we at Biomet believe that the future of the company will very much be based on staying ahead of the technology game, and, by inference at least, OREF helps us do that.

Impact: Why are research and development initiatives so important to Biomet?

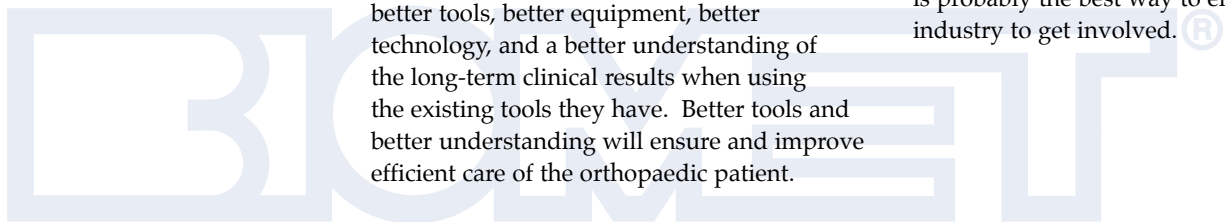
Dr. Miller: Principally because I think it’s important in all aspects of health care, but it’s especially important to those aspects that are based on an aging population. **We need to invest in research to allow us to deliver a lot more care to our aging population.** Orthopaedic research gives the orthopaedic device industry and orthopaedic surgeons better tools, better equipment, better technology, and a better understanding of the long-term clinical results when using the existing tools they have. Better tools and better understanding will ensure and improve efficient care of the orthopaedic patient.

Impact: Supporting research has had an effect throughout the health care system, beyond just the researchers or the companies. How do you think orthopaedic research benefits patients?

Dr. Miller: As a result of research, patients receive better care, and that is truly socially responsible health care. Because of advancements made by orthopaedic research, patients who would otherwise be disabled, bed-ridden, wheelchair bound, or patients who would experience other medical complications that lead to a significantly shorter or less productive life, are put back on their feet, allowing them to continue as contributors to society.

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

Dr. Miller: I think explaining the positive feelings that come from supporting such a Foundation would best drive anybody to contribute to the institution. I think continuing to make the programs of OREF known, and showing the types of research and education their contributions would support is probably the best way to encourage the industry to get involved.



Miller Endowment provides support for multiple grants

(continued from page 1)

Endowment Fund grants in 1997.

"I am extremely grateful to Dane and Mary Louise Miller for their contribution to OREF, and when I have seen them I have always thanked them for their generosity to OREF, to the orthopaedic community, and for stimulating my career." Dr. O'Keefe studied bone loss in orthopaedic implant patients.

"All inflammatory processes have factors that stimulate inflammation and other factors that can inhibit inflammation," Dr. O'Keefe said. "The goal of this particular project was to study whether factors that prevent inflammation are expressed during bone loss around orthopaedic implants, and whether increased expression of those anti-inflammatory factors could prevent some bone loss."

The study resulted in the development of an animal model, which allowed Dr. O'Keefe to investigate the various factors that stimulate or inhibit bone loss. The animal studies led directly to human clinical trials, for which Dr. O'Keefe co-authored a paper with **Edward M. Schwarz, Ph.D.**, which earned the Harris Award from the Orthopaedic Research Society. These clinical trials investigated bone loss around implants in humans.

In addition to the Harris Award, the clinical trial study also led to further research projects in which Dr. O'Keefe studied the natural history of bone loss. **These studies earned funding from the National Institutes of Health, allowing Dr. O'Keefe to continue his research in an effort to achieve his goal of improving patient care.**

"When we know how bone loss occurs over time, we'll have a mechanism to understand how the various factors we might administer to orthopaedic implant patients can prevent that loss," he said.

Dr. O'Keefe believes that such factors may be given to patients by injection once a day or once every several days, in a manner similar to the way osteoporosis patients have been treated with parathyroid hormone, or how some arthritis patients receive Embrel, a factor that prevents tumor necrosis factor alpha (TNF-alpha) — a protein known for provoking inflammation — from binding to its receptor.

"Our initial OREF study, which led to the animal study, has now moved toward understanding how bone loss occurs in humans," Dr. O'Keefe said. **"Our work shows how OREF-funded research can be translated into additional studies, which will have an impact on patients.** Without the initial OREF Research Grant, which was funded by Dane and Mary Louise Miller, I wouldn't have been able to stimulate my research career or continue on to conduct additional research in a clinical setting."

Including Dr. O'Keefe's project, the Dr. Dane and Mary Louise Miller Endowment Fund has provided for nine research projects. Each of these projects has led to existing or potential advancements in patient care:

Regis J. O'Keefe, M.D.
1997 Research grant recipient

Topic: Determined the factors that prevent inflammation that are expressed during bone loss around orthopaedic implants and whether an increased expression of anti-inflammatory factors



could prevent bone loss

Results: Developed a model to investigate bone loss in animals to study the various factors that can stimulate or inhibit bone loss, which led directly to human clinical trials and subsequent research on bone loss around implants in humans

Potential Patient Care Application of Results: Development of a method to administer various factors to patients to prevent bone loss around implants

Joseph Borrelli Jr., M.D.
1998 Career Development Award recipient



Topic: Investigated the causes of post-traumatic arthritis (PTA), which occurs mostly in younger individuals, as a result of joint injury or intra-articular failure

Results: Developed and validated an animal model, which can now be used to study the effects of impact load (trauma) on articular cartilage. The study identified an increase in programmed cartilage cell death (suicide) and both good and bad changes in the cartilage in response to injury. Cartilage cell death is potentially reversible and changes in cartilage cells could be modulated to encourage healing

Potential Patient Care Application of Results: Improvements in the care of young, healthy trauma patients who sustain joint injuries

(continued on page 8)



Miller Endowment provides support for multiple grants

(continued from page 7)

David R. Diduch, M.D.
1999 Career Development Award recipient



Topic: Studied the possibility of delivering growth factors (genes) to a defect in a joint and sustaining them there in an effort to enhance the healing response of the cells involved with repairing the defect or divot in the joint surface

Results: Determined that although it was possible to insert and sustain the genes, the healing cells diminished in number over time and did little to help heal the defect

Patient Care Application of Results: With the increasing number of methods to repair cartilage, this study demonstrated a way to determine if new techniques involving cells to influence healing actually work, which ensures that patients only receive the best possible treatment for cartilage injuries

Darryl D. D’Lima, M.D.
2002 Research Grant recipient

Topic: Safely and accurately measured forces placed on total knee implants and the underlying bone during routine daily activity

Results: Three implants failed during testing

Potential Patient Care Application of Results: Development of implants that can stand up to stress of daily activities to give knee replacement patients a better quality of life

James R. Slauterbeck, M.D.
2004 Clinician Scientist Award recipient



Topic: Studying sex differences between male and female ACL injuries

Potential Results: A reasonable explanation for why female athletes tear their ACLs more often than males, possibly leading to new methods of treating and preventing injury

Potential Patient Care Application of Results: Training for female athletes that teaches them how to jump and land in a way that protects their knees and prevents injury

William R. Creevy, M.D.
2005 Research Grant recipient

Topic: Investigating the dollar value of one treatment over another, including comparisons of direct treatment costs as well as indirect costs, such as time off of work

Potential Results: Addition of economic information to clinical data will provide physicians more information on which to base treatment decisions

Potential Patient Care Application of Results: Patients receive the best, most cost effective treatments for trauma or other orthopaedic conditions





Kenneth J. Koval, M.D.
2005 Prospective Clinical Research Award recipient

Topic: Investigating the best way to surgically stabilize distal radius

wrist fractures in terms of clinical and radiographic outcomes

Potential Results: Determination of the best practice for surgical treatment of these common fractures

Potential Patient Care Application of Results: Patients with distal radius wrist fractures will receive the best, most cost effective treatments

David C. Markel, M.D.
2005 Career Development Award recipient

Topic: Determining if the behavior of inflammatory cell — monocyte — response to joint implants can be defined by investigating them in a stable, well-functioning joint implant, and, with further grants, in a failed implant

Potential Results: Defining the cells' behavior in a stable, well-functioning joint implant will determine if and how cell function can be changed in an abnormal situation

Potential Patient Care Application of Results: Learning how inflammatory cells function in both normal and abnormal settings could lead to a way to treat patients to prevent early implant failure or loosening



David S. Ruch, M.D.
2005 Prospective Clinical Research Grant recipient

Topic: Comparing the technique of attempting to fix torn ligaments that

attach the radius bone to the ulna bone at the wrist using arthroscopic techniques with the technique of shortening the ulna bone to prevent it from moving abnormally at the wrist

Potential Results: Each technique has advantages and disadvantages — this research should provide an answer as to which technique is better

Potential Patient Care Application of Results: Identifying the optimal treatment for common wrist pain to inform patients of the risks and effectiveness of each technique so that they can make decisions about their treatment





Answers in the archives

Disease pathology collection teaches orthopaedists best methods to treat current orthopaedic diseases

A new system to store an aging collection of disease data will inform orthopaedic surgeons how past cases were treated, giving them ammunition to provide better care for their present and future patients.

Deep within Henry J. Mankin, M.D.'s home, thousands of photographs, slides, and letters fill a wall of filing cabinets to overflowing. Stacked in excess atop the cabinets, these are not merely treasured mementos with which Dr. Mankin cannot bear to part. They could be, according to Dr. Mankin, important research tools for orthopaedic surgeons.

"The contents consist of bone, cartilage, and soft tissue pathology," said Dr. Mankin, who figures that altogether there are more than 12,000 patient cases archived in his basement. He plans to use these collections for education and research.

"If you understand the disease, you can treat it very effectively. If you treat symptoms or treat what the patient wishes, you can make a lot of mistakes," Dr. Mankin said. "It really is necessary to understand the nature and the character of, and the possible problems that can arise from a disease. That's why, crucial to our understanding of orthopaedics, is an understanding of the pathophysiology of disease."

Orthopaedic History Lesson

Dr. Mankin's collection of data, which describes the functional changes that accompany disease, comes from several sources. Approximately 7,000 cases are from Dr. Mankin's own collection of 2 X 2 slides for which he has developed a computerized system to track the various diseases.

Friend and colleague Henry L. Jaffe, M.D., a pathologist, left Dr. Mankin his pathology collection upon his death. Dr. Jaffe's collection consists of about 5,000 cases for which he kept a histological slide, X-Rays, photographs of patient material, and text copies of letters that he sent to the referring physician. Among Dr. Jaffe's collection are also included data collected by Jakob Erdheim, M.D. of Vienna.



Dr. Henry L. Jaffe



Dr. Jakob Erdheim



Dr. Crawford W. Campbell

"If a truth is uncovered where there is insufficient information, that's a step forward. If people learn something about disease that they wouldn't know otherwise, that's a giant step forward."

"Just before the Anschluss, before Dr. Erdheim was killed by the Nazis, he sent his collection to Jaffe rolled in a very large rug," said Dr. Mankin, noting the historical significance.

The rest of Dr. Mankin's collection was willed to him by another friend and colleague, Crawford W. Campbell, M.D.



Dr. Henry and Mrs. Carole Mankin

Letting data out of the basement

Dr. Mankin, who currently serves as a senior research consultant for the Orthopaedic Oncology Service at Massachusetts General Hospital, offered to store the collections in his home when he learned that the hospital did not have the room or the desire to keep them.



Henry J. Mankin, M.D. stores a collection of more than 12,000 pathology cases in his basement. He hopes to place all of them on CDs to aid in orthopaedic education.

"They didn't think it was worth keeping so they were going to put it on Iron Mountain, and that would have been the end of it. I decided to put it in my basement instead," said Dr. Mankin. "So I have a collection, extraordinary in size, in my basement."

Providing storage space, however, was not the reason that Dr. Mankin chose to keep the files. As a life-long educator committed to teaching the pathophysiology of orthopaedic disease, Dr. Mankin saw the potential to turn the collection into a database that could serve as an important educational system for orthopaedic surgeons, residents, fellows, and staff and also provide a basis for clinical research.

"What I'm trying to do is make copies of it on CDs and turn it into something

that is logical and sensible for people to use for education and research. And I'm doing it in part with a generous grant from the Orthopaedic Research and Education Foundation," Dr. Mankin said.

Every year OREF funds approximately 10 Educational Awards of up to \$25,000. These are used for educational programs developed in conjunction with a recognized, national organization to evaluate the effectiveness of orthopaedic education at all levels; for clinical consensus conferences; for workshops and symposia; for innovative approaches to education, and, like Dr. Mankin's project, for the development of educational electronic media.

With his educational grant Dr. Mankin hopes to turn his collection of data into a searchable database to make it easy for orthopaedists to find information about a particular disease. So far he has been able to copy more than 900 cases to CDs.

"One of the things we're trying to do is set up an Internet collection that could be used like Google™. You'd type in, say chondrosarcoma, and you'd be provided with the material for chondrosarcoma, including various pictures and summaries of the patients and so forth," Dr. Mankin said.

The more treatments change...

In addition to education, Dr. Mankin points out that the data can also be used to perform research. He recently published a paper in *Clinical Orthopaedics and Related Research* comparing current information on Paget's sarcoma with the information Dr. Jaffe collected between 1930 and 1950. Dr. Mankin found, to his dismay, that treatments for Paget's sarcoma — a highly malignant tumor that arises in patients with widespread Paget's disease — have not improved the outcome. The death rate is the same.

"I presented the paper at a meeting of the Musculoskeletal Tumor Society and everybody was stunned and they didn't believe me, so I now have a small grant to collect cases of Paget's sarcoma from members of the Musculoskeletal Tumor Society and I'm putting together a large collection based on that paper," Dr. Mankin said. This collection, Dr. Mankin hopes, will show what needs to be done to better treat the disease.

Dr. Mankin notes that other orthopaedists could use the Jaffe-Erdheim-Campbell

"You've got to know something about the disease to make people well. That's an absolute fact."

collection in a similar fashion to his Paget's sarcoma study.

"Suppose you want to write a paper about Clear Cell sarcoma, which is a rare tumor. Not very many are reported in the literature. Well, if you go through the Jaffe collection, you'll find another 20, and then you can take those cases and put them together, define them, review their X-Rays, look at their histology and you'll be able to write the paper. It's an exciting idea."

As with Dr. Mankin's paper on Paget's sarcoma, this information can be used to evaluate current treatment methods to determine if alternatives are needed to enhance patient care.

(continued on page 12)

Answers in the archives *(continued from page 11)*

Disease pathology collection teaches orthopaedists best methods to treat current orthopaedic diseases

Believing in Education

Although Dr. Mankin said that he would have found some way to complete his project, he acknowledges the fact that he couldn't have started it without the funding from OREF.

"I didn't have any idea about how to cover the cost of putting the information into CDs and it occurred to me that it would be wonderful to try to do it through some of the orthopaedic organizations. The one that made the most sense, by definition, was OREF."

OREF also made sense because of Dr. Mankin's long history with the Foundation. He served as an OREF Regional Chairman for the greater New York area between 1966 and 1972, was a member of the Grant Advisory

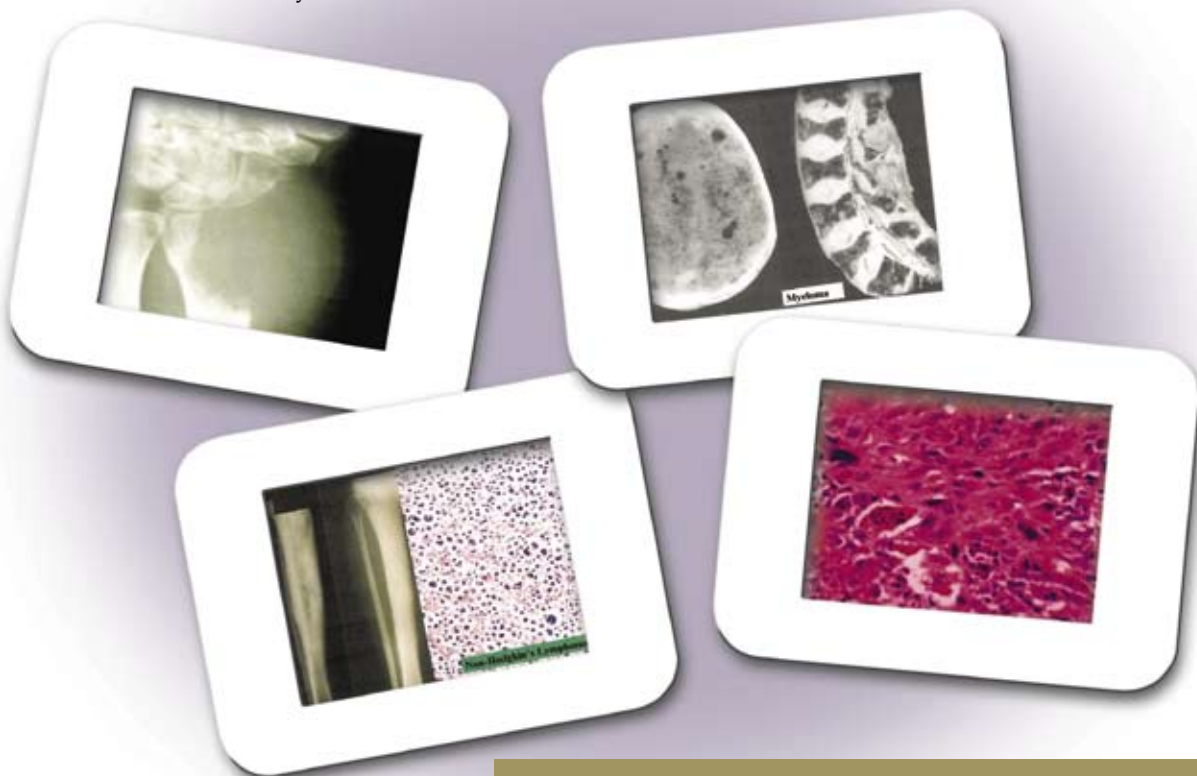
Committee between 1971 and 1982, and a member of the Constitution Committee from 1983 to 1984. In addition, Dr. Mankin and his wife, Carole, have made annual gifts to OREF at the highest Order of Merit level almost since the program began nearly 25 years ago.

"We think it's a magnificent organization. It sponsors, supports, and encourages research and education, and that's my whole life. That's what I believe in," said Dr. Mankin. "If you don't conduct research, things will stay the same and if you don't educate people in one generation it's the end of your world. If grants are funded for the purpose of education and clinical research, everybody — orthopaedic surgeons, residents, staff — benefits. If a truth is uncovered where there is insufficient

information, that's a step forward.

If people learn something about disease that they wouldn't know otherwise, that's a giant step forward."

Dr. Mankin believes that this philosophy of learning can be applied to patients as well. "You've got to know something about the disease to make people well," stated Dr. Mankin. "That's an absolute fact. And that's what the Jaffe-Erdheim-Campbell collection does. With sections on osteoarthritis, rheumatoid arthritis, sarcoid, syphilis, polio, all kinds of diseases that are seen or were seen everyday, it teaches you about the disease you treat. If the physicians who care for patients with connective tissue disorders know more about the disease, the patients will live better and longer."



Samples of pathology X-Rays and microscope photos from Dr. Mankin's collection. Clockwise from top left: giant cell tumor, myeloma, osteosarcoma, lymphoma

Institutional Giving Program facilitates gifts from Hospitals, Institutions, and Physician Groups

Every year, Institutions, Hospitals, and Physician Groups contribute more than half a million dollars to OREF.

OREF recognizes each individual donor within the orthopaedic department as well as the Institution, Hospital, or Physician Group. Special recognition is given to institutions in which 100% of the surgeons in a particular orthopaedic department made a contribution.

Last year, the Institutions, Hospitals, and Physician Groups listed on page 14 participated in OREF's Institutional Giving Program. For more information about Institutional Giving at OREF, please contact Ed Hoover, Director, Annual Giving at hoover@oref.org or (847) 384-4354 or Maria Aguirre, Development Coordinator, at aguirre@oref.org or (847) 384-4357.

"Our faculty gave a significant amount of money to the department, knowing that a portion of it would be contributed to OREF. Because our department – our faculty members and residents – have been supported by OREF grants, it's only natural that we should support OREF as well.

It's not a direct return, but the fact is that OREF funds many people, not just our department, which strengthens the specialty. Look at how much research was done on BMP — Bone Morphogenetic Protein — which occurred 20 years ago when people had only a trivial understanding of it, and now it's being used clinically. The research that OREF supports now will have an impact on our practice in the future." — Joseph D. Zuckerman, M.D., Department Chair, New York University



When presenting the case for supporting OREF to the Department, I point to the many advances in science that have occurred through OREF funding — advances that have shaped both our knowledge and our decision making process in practice. I have an excellent faculty that is already sensitive to issues surrounding support for research and education, and I believe that with a serious discussion of advances in science and emphasis on the need to give back, faculty embrace the concept of giving to OREF." — Cato T. Laurencin, M.D., Ph.D., Department Chair, University of Virginia Health Systems



We only make progress through research. We make a contribution in every individual's name through the department to OREF. OREF provides training wheels for clinician scientists' research careers and allows them to obtain early funding and data that affords them the opportunity to be competitive at the NIH level. If orthopaedic surgeons have a vested interest in the level of care that they can provide to their patients, and in treating those patients in ways that are appropriate and state-of-the-art, they certainly are the beneficiaries of research. Somebody needs to prove treatments, such as cartilage transplantation, are effective so that orthopaedic surgeons don't continue that type of surgery 10 years from now if it's not. It's a process of continual improvement. — Vincent D. Pellegrini Jr., M.D., Department Chair, University of Maryland Medical System



Institutional Giving Program facilitates gifts from Hospitals, Institutions, and Physician Groups

2004 Institution, Hospital, and Physician Group Contributions

\$65,000 and above

Hospital for Special Surgery** New York, NY

\$20,000 - \$29,999

Brown University School of Medicine** Providence, RI

Case Western Reserve University* Cleveland, OH

Duke University Medical Center** Durham, NC

Massachusetts General Orthopaedic Associates** Boston, MA

Mayo Clinic Graduate School of Medicine* Rochester, MN

Medical College of Wisconsin** Milwaukee, WI

New York University - Hospital for Joint Diseases** New York, NY

SUNY Upstate Medical Center** Syracuse, NY

University of California San Francisco** San Francisco, CA

University of Iowa Hospitals** Iowa City, IA

University of Rochester Medical Center** Rochester, NY

University of Wisconsin Hospital & Clinic** Madison, WI

\$10,000 - \$19,999

Boston University School of Medicine** Boston, MA

Children's Orthopaedic Surgery Foundation, Inc.** Boston, MA

Columbia University - College Physicians/Surgeons** New York, NY

Loyola University of Chicago** Chicago, IL

Southern Bone & Joint Specialists (Golf Outing) Dothan, AL

UMDNJ - New Jersey Medical School** Newark, NJ

University of Cincinnati Medical Center** Cincinnati, OH

University of Maryland** Baltimore, MD

University of Minnesota** Minneapolis, MN

University of Pittsburgh Medical Center** Pittsburgh, PA

University of Virginia** Charlottesville, VA

Washington University School of Medicine* St. Louis, MO

\$5,000 - \$9,999

Beth Israel Deaconess Medical Center** Boston, MA

Emory Orthopaedic Clinic** Atlanta, GA

Long Island Jewish Medical Center** Great Neck, NY

University of Missouri (Columbia)** Columbia, MO

Up to \$4,999

Pennsylvania State University** Hershey, PA

SUNY - University at Buffalo Buffalo, NY

Yale University School of Medicine New Haven, CT

Resident Contributions to OREF in 2004

Boston University School of Medicine Boston, MA

Medical College of Wisconsin Milwaukee, WI

University of Alabama Medical Center Program Birmingham, AL

University of California San Diego Medical Center San Diego, CA

University of Cincinnati Medical Center Cincinnati, OH

University of Iowa Hospitals Iowa City, IA

University of Tennessee/Campbell Clinic Memphis, TN

University of Virginia Charlottesville, VA

University of Washington Seattle, WA

** Denotes 100% Order of Merit Participation

* Denotes 100% Participation



Please Support OREF's 2005 Annual Campaign

Personal Data

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Name: _____

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B Annual Giving Levels:

Order of Merit—Platinum	\$5,000 & Above
Order of Merit—Gold	\$2,500-\$4,999
Order of Merit—Silver	\$1,000-\$2,499
Bronze	\$500-\$999
Copper	Up to \$499

Enclosed is my check for the 2005 calendar year in the amount of \$ _____.

I would like to pledge \$ _____ for 2005.

Please remind me of my pledge during the month of _____.

Charge my contribution of \$ _____ to my: Visa Mastercard AMEX

Signature: _____

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(For AMEX: Please include both embossed and printed numbers, and AMEX Credit Card billing address)

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My contribution is in: Memory of Tribute to

Honoree: _____

Please send an acknowledgement of this memorial/ tribute to: _____

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D Designated Giving Program

Order of Merit members (contributions of or exceeding \$1,000 annually) have the opportunity to designate support for specialty societies through their annual contribution to OREF.

NOTE: Contributions less than \$1,000 may not be designated.

I understand that a minimum of \$500 of my annual Order of Merit contribution is **unrestricted** to OREF. I have indicated below the total amount I'd like to designate to OREF and to these specialty societies:

\$ _____	OREF	\$ _____	KS
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\$ _____	HS	\$ _____	SOMOS
\$ _____	ISAKOS	\$ _____	WOA
\$ _____	JRGS	\$ _____	Total Gift

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.

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Discovering the Future of Orthopaedics

Katrina Relief Act: Special Tax Break for Year-End Giving

If you are considering a year-end gift, Congress has provided extra incentive by creating a significant — but temporary — tax break. The Katrina Emergency Tax Relief Act of 2005 (KETRA) was signed into law September 23, 2005. This legislation presents tremendous year-end gift-giving opportunities to many donors interested in a number of charities. In essence, KETRA offers **two key federal income tax incentives for contributions made from August 28, 2005 to December 31, 2005.**

First, cash donations made to most public charities (not just disaster relief organizations) can be used to offset up to 100% of adjusted gross income for this year. Prior to the adoption of

KETRA, contributions were limited to 50% of a tax payer's contribution base for the year. In addition, and one nuance that should be discussed with your financial planner, some donors may be able to use the provisions of KETRA to take deductions this year for gifts made in previous years.

Another key feature of KETRA is that it may facilitate the indirect roll over of IRA assets used as gifts to public charities. Given the number of dollars currently housed in qualified retirement plans such as IRAs, some industry experts speculate that the provision could spur up to \$10 billion in additional giving by the end of 2005. Retired donors interested in making significant gifts should

consider using these assets during this window of opportunity.

Additional information about KETRA, and a copy of the legislation are available at the government Web site www.house.gov/jct. Because of the unique characteristics of this legislation, and the timing, it is important that you talk to your financial planner or an attorney to review the specifics of your planned donation. We urge you to explore this unique opportunity to make contributions to charities of interest to you, hopefully including OREF, and to share this information with your friends.