

Campbell research helps surgeons know which new products deliver on promises

In the rapidly-evolving orthopaedic specialty of total joint replacement, clinical data is the tortoise and new products are the hare.

“In this field, clinical data seriously lags behind product introduction,” said Dr. John Crockarell, a Campbell Clinic surgeon and researcher whose clinical studies help orthopaedic surgeons make informed judgments about which new products will produce the best outcomes over time.

In the last year, Dr. Crockarell analyzed information from Campbell Clinic patients to produce two studies that have been accepted for publication. Using radiographic analysis, Dr. Crockarell learned that Reflection® cementless acetabular components did not wear as well and had higher revision rates than newer polyethylene products. His findings will be published in the *Journal of Arthroplasty*.



Dr. John Crockarell

Dr. Crockarell’s review of the Contour® reconstruction ring confirmed some of the limitations of this type of device. *The American Journal of Orthopaedics* will publish his findings in this study.

CHANGE BEGS FOR RESEARCH

Dr. Crockarell has seen major changes in total joint replacement since he began practicing at Campbell Clinic in this specialty in 1997. In addition to improvements in the design and materials of implant devices, the decade has brought a greater emphasis on minimally-invasive surgery and better pain management, Dr. Crockarell said.

“Orthopaedic surgeons are always seeking better products and techniques if they mean better outcomes for patients,”

Dr. Crockarell said. “Clinical research helps us see how a product actually performs once the implant is done. This kind of information is always valuable to the surgeon and of great benefit to the patient.”

RESEARCH AIDS FUTURE SURGEONS

Dr. Crockarell’s interest in research began when he was a Campbell Clinic resident, then kicked into higher gear when he did a total joint fellowship at The Mayo Clinic.

“At Mayo, I saw how research can be done efficiently and effectively,” he said. “That experience inspired me to want to do research when I began my practice. Campbell Clinic has a large patient population, which is essential to clinical research.”

Campbell Clinic’s residency program, which is funded by The Campbell Foundation, requires that all residents complete a research project during their residency. This spring, Dr. Crockarell will be working with Campbell resident Dr. Michael Davis on research involving the Oxinium® femoral head. In a comparison study, the two will look at patients who have had both hips replaced, with the Oxinium implant used in one hip and a different implant for the other.

Dr. Crockarell will also be completing a total knee clinical research project, using the Genesis II implant.

“Campbell Clinic’s requirement that residents do a research project can be a great benefit for future surgeons,” Dr. Crockarell said. “The hope is that our residents will get bit by the research bug, as I did.”

Campbell Clinic’s residency program, which is funded by The Campbell Foundation, requires that all residents complete a research project during their residency. “The hope is that our residents will get bit by the research bug, as I did,” Dr. Crockarell said.