DARF as a Local, National and International Scientific Resource

The Donaldson Arthritis Research Foundation (DARF) is pleased to offer advanced research facilities for LLU students, Orthopedic Residents and International Students and Scientists from many different disciplines. Currently DARF has collaborations initiated with Professor Ian Clarke, Director of the Peterson Research Center at Loma Linda University.

Fig. 1. TK. Donaldson MD

Fig. 2. IC. Clarke PhD

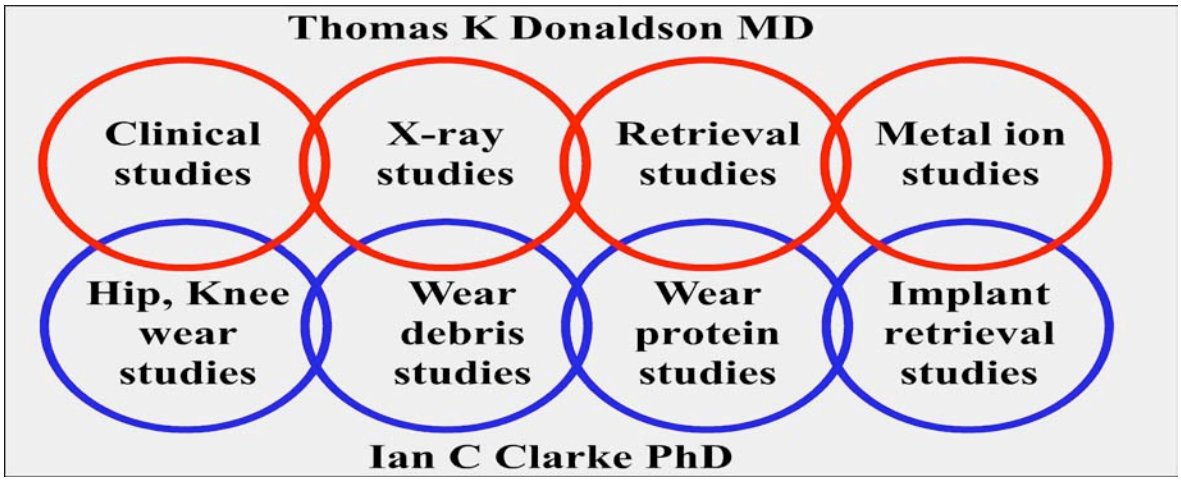
Thomas K. Donaldson MD (Fig. 1) and Professor Ian C. Clarke (Fig. 2: Director of Peterson Research Center, LLU) have a proven track record of studies on artificial hip and knee joints.

They create international presence with podium presentations at both national and international symposia.

Dr. Donaldson presented his clinical studies of hip and knee arthroplasty in Mexico last week.

This week Dr. Clarke flies to Italy to present the latest LLU research on the Tribology of ceramic hip joints (2nd International Ceramics Congress, Verona).

Dr. Donaldson maintains that the reason for the success of his collaboration with Professor Clarke is the mutually beneficial overlap of their circles of expertise (Fig. 3).



Dr. Donaldson with the Arthritis Research Foundation (DARF) includes his red circles (Fig. 3) of clinical and surgical expertise with follow-up patient studies of implant wear and performance. In parallel with Dr Donaldson's efforts, Dr. Clarke runs wear studies of implants (Fig. 3: blue circles) using his multi-station hip and knee simulator machines.

The majority of the research funding for Implant Tribology research at LLU comes from contracts awarded by the orthopedic industry. This involves Dr Clarke's blue circles of expertise (wear, debris and metal ions). Unfortunately the orphan projects are the remaining protein and implant retrieval studies. The Orthopedic industry sees no commercial value in supporting such research, although this is where the most important knowledge will come from eventually. DARF is please do create an implant retrieval program and is dedicated to finding novel ways to fund this invaluable area of research (Fig. 3).