

DEPARTMENT OF ANATOMY

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SCISEM - Interdepartmental Scientific Seminars 2024 Season - Room 402 1st session - Friday 15th - 12.00 pm

Session 1. The Malta Hip - A local Biomedical device Success story

Following collaborative research and shared PhD and Masters students between Pierre Schembri-Wismayer (PSW) and Prof Ing Joseph Buhagiar (JB), an initial diagram of a CV (constant velocity) joint as a potential new hip joint led to a number of prototypes, a CVP and TDP MCST application, a PhD studentship (Dr Ing Donald Dalli -DD), a number of international and national awards and finally a prototype (well 8) which were sent abroad for testing in a facility in Germany resulting in considerably lower wear than the similar classical ball and socket joint hip prostheses made of similar materials. Unlike the majority of tradional improvements on the joint, ours was one made by means of differences in design, not in materials or coatings as most are worldwide. This had the additional benefit of not using new potentially toxic materials needing further testing.

The novel hip joint was patented with the help of the Knowledge transfer office, commercialised via the Dutch venture builder NLC and was the basis for the British-registered start-up Garland Surgical. The inventive team of PSW, JB, DD and Prof Ing Pierluigi Mollicone, as well as post-doc Dr Ing Leonardo Fanton and Prof Ing Bertram Mallia regularly consult with Garland and are helping to continue developing the device.