



**L-Università
ta' Malta**

**DEPARTMENT OF
ANATOMY**

**Faculty of
Medicine & Surgery**

University of Malta
Msida MSD 2080, Malta

Tel: +356 2340 3289
anatomy.ms@um.edu.mt

www.um.edu.mt/ms

SCISEM - Interdepartmental Scientific Seminars

2024 Season - Room 402

1st session - Friday 15th - 12.00 pm

Session 2. Tumour vaccines in Immunotherapy - a local overview

Pierre Schembri-Wismayer MD PhD

Linking with the previous (MaltaHip session), the same shared biomedical-engineering PhD student who drew the first CV joint type image of what eventually became the MaltaHip also launched this research within our lab. He decided to take 2 rats from the animal house home as pets to save them from being culled. He, Dr Ing Malcolm Caligari Conti, loved the rats and fed them VERY WELL. They became seriously obese and both developed natural primary mammary cancer (in one case also with bilateral axillary lymph node metastases). This is a lovely model which I tried to replicate but never got close even feeding rats the most obesogenic official chow which I could find and ordered. Malcolm wished to save the rats and asked me to do something. I had been interested in the research of Prof Tadao Ohno for a while and tried a modification of his AFTV (autologous formalin-fixed tumour vaccine). This was done using relatively cheap and simple techniques, using tumour tissues removed from the rats under anaesthesia.

The rats were immunised with the tumour vaccine and sent home to Malcolm. Days later, they were re-operated after developments. The tumour tissue was lysed and the residual capsule was sent to collaborators in Palermo for histological analysis. Results seemed positive and this procedure has now been used in a number of pets with positive results. A perfect model for this is not easy as Srdjan Tadic (presently pursuing his PhD in Spain) found out during his Masters here. This has led to this being followed up by new PhD student Dr Olaf Woods in a new model, my involvement in the IMMUNO-Model COST Action in order to find better models and an application for ERC synergy funds with Bulgarian and Portuguese partners. Because this method has not yet been patented, please consider this information confidential.
