

ELECTRON MICROSCOPY UNIT



Klaus W. Wolf, PhD
Head of Unit

WORK OF THE UNIT

The Electron Microscopy Unit was instrumental in assisting various interested persons to benefit from its facilities and services during the 2015/2016 academic year. Researchers on and off the Mona Campus, Graduate -, Undergraduate - and High School students received research results, training, exposure and understanding of electron microscopy (EM), optical microscopy (OM), macrophotography (MP) and scientific photography. Research activities were compromised by the demise of the specialized digital camera – an integral part of the research light microscope at the Unit. The main investigations done and services provided are listed in Table 1.

Laboratory sessions were conducted in EM and OM in the graduate course Research Methods “C60M” from the Department of Chemistry. Laboratory sessions were also conducted in the EM module of the undergraduate virology course “BIOL3404” from the Department of

Electron Microscopy Unit

Table1. Main investigations and services undertaken during the 2015/2016 academic year.

Specimen	Technique	Institution
Chicken bones (raw)	Preparation of conducting media and mounting of electrodes	Dept. Physics
Chicken bones with mounted electrodes	MP	Dept. Physics
Flowers of <i>Cannabis sativa</i>	MP	Dept. of Life Sciences
Glass fibers	OM	Dept. Physics
Margarine	OM	Dept. Chemistry
Pimento flower	OM	Dept. of Life Sciences
Pimento flower	Specimen preparation, extensive sectioning and slide mounting	Dept. of Life Sciences

Life Sciences. Dr. Wolf contributed to the graduate course Forensic Sciences from the Department of Basic Medical Sciences which involved lectures and a laboratory session on Microscopy and Digital imaging. Laboratories and lectures on Scientific Photography were presented in the undergraduate course Research Skills from the Department of Life Sciences.

RESEARCH IN PROGRESS

Gamete structure and development in insects, using various microscopic techniques.

The collaboration with Zoologists from the University of Salzburg (Austria) on Ciliates in *tank bromeliads* continues and a collaboration on *Jamaican Onychophora* (velvet worms) has been established with Zoologists at the University of Kassel (Germany).