

ELECTRON MICROSCOPY UNIT



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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 2016/2017 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 and scientific photography. The main investigations done and services provided are listed in Table 1.

A lecture and laboratory sessions were conducted in the EM module of the undergraduate virology course “BIOL3404” from the Department of Life Sciences. Mr. Reid contributed to the graduate course **Forensic Sciences** from the Department of Basic Medical Sciences which involved lectures and a laboratory session on Microscopy. Laboratories and lectures on Scientific Photography and Microscopy were presented in the

Table1. Main investigations and services undertaken during the 2016/2017 academic year.

Specimen	Technique	Institution
Fish Teeth	OM	Dept. Life Sciences
Insect Larvae (2 different students/researchers)	OM	Dept. Life Sciences
Kidney Stones	OM	Dept. Physics
Margarine (2 different students)	OM	Dept. Chemistry
Rock Sections (6 different students/researchers)	OM	Dept Geography & Geology
Starch Grains	OM	Dept. Chemistry
Wax Sections	OM	Dept. Chemistry

undergraduate course **Research Skills** from the Department of Life Sciences by Dr. Klaus Wolf.

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).

PUBLISHED WORK (CHAPTERS IN A GERMAN TEXTBOOK OF GENETICS)

Wolf, K.W. and Soppa, J. (2017) Nukleinsäuren, Chromatin und Chromosomen. In: *Taschenlehrbuch Biologie: Genetik*, Georg Thieme Verlag, Stuttgart, New York, p 1–49

Wolf, K.W. (2017) Meiose. In: *Taschenlehrbuch Biologie: Genetik*, Georg Thieme Verlag, Stuttgart, New York, p 229–253

Wolf, K.W. (2017) Formalgenetik. In: *Taschenlehrbuch Biologie: Genetik*, Georg Thieme Verlag, Stuttgart, New York, p 254–294

Wolf, K.W. (2017) Geschlechtsbestimmung. In: *Taschenlehrbuch Biologie: Genetik*, Georg Thieme Verlag, Stuttgart, New York, p 295–315.