

PARASITOLOGY RESEARCH DIVISION



Dr. Kay Thwe Han

MBBS, MMedSc (Microbiology)(UM 1)

1. Historical Background

In 1963, the Parasitology Research Section was first conceived in the womb of Microbiology Research Division together with Bacteriology, Virology and Entomology Research Sections. It was given birth as an independent research division in 1969, under the supervision of Professor Margaret Tu as the head of division. At that time, it was started with one part-time Head of Division, 3 Research Officers and 4 technicians and one laboratory attendant. In 1973, Dr. Khin Ohn Lwin became Research Scientist cum Acting Head of Division. After completion of the Clinical Research Centre building in 1974, the Parasitology Research Division was moved to that building. When Dr. Myint Lwin started his duties as the head of division in 1978, with the active contribution of Dr. Myint Oo and Daw Than Saw, research on malaria, filariasis and intestinal infestations were launched abreast with the international level. After having training abroad, the scientists of the division were engaged in clinical research as well as *in vitro* and *in vivo* experiments of malaria. The drug resistant malaria had been the priority research issue for which, experimental studies on chemotherapy, immunology and biochemistry of malaria were conducted and had been able to contribute many valuable information for improving the drug policy and control and management programme of the nation as well as of the South- East Asia region. Research on amoebiasis, filariasis, burden and management of intestinal worms and inter-relationship between aforesaid diseases versus immune system, nutrition and anemia had also been carried out and salient findings of which were effectively utilized by the disease control programmes, school health team, rural health personnel and general practitioners. Investigations on targeted anthelmintic chemotherapy and immunological aspects of worms produced applicable results for the community. With the increasing staff strength and research capacity, the scientists endeavored not only laboratory research but also the clinical and field-based research by collaborating with the clinicians, epidemiologists, entomologists, health care and control programme personnel. Biochemical investigations like enzyme characterization of diseases especially malaria, biological experiments like *in vitro* cultivation of malaria parasites and drug susceptibility tests, malaria transmission studies in the insectary, testing of different antimalarials including reputed traditional medicines and formulations for antimalarial activity by using *in vivo* rodent malaria model, immunological tests for detection of both antibodies and antigens of *Plasmodium falciparum* and *Plasmodium vivax*, community-based field studies like dynamics of malaria transmission,

seroepidemiology of different malaria endemic areas, case management studies and clinical trials of different antimalarial drugs were conducted in 1980s. In 1990s, the division's scientists extended its collaboration more with international agencies and universities and also joined in many scientific networks especially with WHO, UNICEF, and IAEA. The results gained from the Therapeutic efficacy studies of Artemisinin-based combination therapies (ACTs) in sentinel sites of Myanmar were applied in updating the national malaria treatment policy. Since the time the Department of Medical Research was recognized as the WHO Collaborating Centre for Research and Training on Malaria in 2003 for its achievements in different disciplines in malaria research and management, it has been based at the Parasitology Research Division. The PCR-based malaria molecular laboratory was first established in 2005/ 2006 and has now reached to a state which can run quality controlled molecular tests as well as training course on molecular biology in malaria. Other opportunistic parasitic infections like *Pneumocystis carinii*, cryptosporidiosis, *Isospora belli*, microsporidiosis, etc. were also investigated. Research projects on diverse helminthic infections and emerging neglected parasitological diseases like schistosomiasis are also being conducted. The current staff strength is 19 comprising one head, 2 Research Scientists, 5 Research Officers, one nurse, 8 laboratory technicians and one laboratory attendant.

2. Former Heads

Sr. No.	Name	Degree	Year (From-To)
1.	Prof. Dr .Margaret Tu	MBBS, DTM & H (University of London), DAP &E (University of London) MSc (Bacteriology) (University of Manchester), MRCP (Edinburgh)	1963-70
2.	Dr .Khin Ohn Lwin	MBBS, DP &TM (Rgn) MRCP (Edinburgh)	1970-1982
3.	Dr. Myint Lwin	MBBS, MSc (Parasitology) LSHTM (London School of Hygiene & Tropical Medicine) MSc (Applied Immunology) PhD(Protozoology, Chemotherapy, Immunology)	1982-1993
4.	Prof. Myint Oo	BSc (Biology), DipStats, MSc (Zoology) (Ygn), PhD (Biochem & Molecular Genetics) (UNSW)	1993 - 1998
5.	Dr. Ye Htut	MBBS, MSc (Medical Parasitology) LSHT, D.L.S.H.T.M (Tropical Medicine), FRCP (Scotland)	1998- 2006
6.	Dr. Myat Phone Kyaw	MBBS, MMedSc (Biochemistry) (UMM), PhD (SriLanka)	2006-2011
7.	Dr. Thaug Hlaing	MBBS, DTM & H, MCTM (Bangkok), PhD (Manchester)	2011-2012

3. Current Staff

No.	Name	Designation	Contact Phone No. Email:
1.	Dr. Kay Thwe Han	Deputy Director & Head	drkaythwehan@yahoo.com 09-5169228
2.	Dr. Khin Myo Aye	Research Scientist	khinmyoaye79@dmr-mm.org
3.	Dr. Zayar Han	Research Officer	drzayarhan@gmail.com 09-421170896
4.	Dr. Myo Win Htun	Research Officer	drmyowin.htun@gmail.com 09-5113185
5.	Dr. Wai Phyo Maung	Research Officer	drwpm1990@gmail.com 09-5191781
6.	Dr. Hnin Azili	Research Officer	dr.aziliazili@gmail.com 09-5078039
7.	Daw Soe Soe Han	Research Officer	soesoehan.net@gmail.com 09-5129776
8.	U Phyo Zaw Aung	Research Assistant-1	phyozawsungdmrlm@gmail.com 09-43104127
9.	Daw Nechi Aung San	Research Assistant-1	nechiaungsan@gmail.com 09-426990592
10.	Daw Yin Yin Myint Myat	Research Assistant-2	yinyinmyintmyat@gmail.com 09-448029255
11.	Daw Naing Naing Win	Research Assistant-2	queenpower90@gmail.com 09-420193814
12.	U Sanlin Aung	Research Assistant-3	09-420173791

4. Area of Research Activities

No.	Area of Research Activities	Choice
1.	Communicable Diseases	√
2.	Non-Communicable Diseases	
3.	Nutritional Factor	
4.	Research Capacity Strengthening	√
5.	Health System Research	√
6.	Environmental Health	√
7.	Traditional Medicine	
8.	Research Culture Promoting	
9.	Technology Development	