

# Regional Dermatology Training Centre in Moshi, Tanzania – pursuing a dream

*Skin disease is common in the community, particularly in resource-poor areas.*

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The International Foundation for Dermatology (IFD) was established more than 20 years ago by the International League of Dermatology Societies (ILDS). This was because, in many parts of the world, there was little care available for patients with skin problems – often because there were no, or too few, dermatologists, or local healthcare depended on healthcare workers with little training in the management of skin disease.<sup>[1]</sup> This unsatisfactory situation was compounded by the fact that, in these areas, skin disease was often very common – among the top three most frequent reasons for seeking medical help. From its outset the IFD was faced with the challenge of developing new approaches to reach the maximum number of patients using clinical or nursing help appropriate to the local conditions and health services. A logical development was to concentrate on areas where there was a major shortage of trained dermatologists.

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The concept of dermatological care is broad. In addition to the management and control of common diseases,<sup>[2]</sup> it also includes the recognition of conditions that present with skin signs and symptoms, including those with serious implications for one's health. Therefore, early recognition of disease states, such as HIV or onchocerciasis, through skin presentations and knowledge of pathways for care, forms part of this work. The intention

is to promote the provision of better services in areas where skin- or sexually transmitted infections are common and poorly managed through lack of trained personnel or resources – frequently both. To place this work in perspective all this is set against a national background of health where the HIV pandemic, a rising tide of chronic diseases such as diabetes, and poverty dominate all healthcare initiatives. In these same areas endemic diseases such as onchocerciasis or lymphatic filariasis are common and may present with signs and symptoms affecting the skin. Skin disease often appears to be a small player in this big league of international health. However, because so little attention has been paid to the alleviation of this problem, skin conditions often dominate the pattern of illness at village or community level because they are so common. Poor treatment exacerbates the problem because it fails to alleviate the conditions and has a wider impact on continuing ill-health, as well as affecting local micro-economics through erosion of household budgets.

## Regional Dermatology Training Centre

In considering how best to accomplish these aims the IFD focused on two activities in particular, education and training, and the assessment of dermatological need.<sup>[2]</sup> The latter is important as it informs on the range of skin diseases that are common at community level, as well as their impact, and helps to identify possible routes for improvement. The first project of the IFD focused on the establishment of a training centre in sub-Saharan Africa.<sup>[3]</sup> The Regional Dermatology Training Centre (RDTC), in Moshi, Tanzania, was established in 1992 as a partnership with the Tanzanian Ministry of Health and the Good Samaritan Foundation. The centre is an integral part of the compound of the university hospital of the region, the Kilimanjaro Christian Medical Centre (KCMC). There is also an associated medical school, Kilimanjaro Christian Medical College, the

second in the country. The principal objective of the RDTC is the care of skin disease seen in the locality, together with the training of healthcare leaders at front-line level, usually senior clinical officers or nurses, through a 2-year university-based diploma course.

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The Advanced Diploma in Dermato-Venereology (ADDV) course has trained more than 250 senior clinical officers from 13 different countries. The course combines practical clinical expertise in all the major diseases affecting the skin, their public health implications, sexual health problems and leprosy. Students also perform health service research projects as part of their training; these provide a unique insight into prevalence, need and demand for healthcare at community level. Annual prizes are awarded for the student achieving the highest mark in the overall assessment (Alfred Kopf prize), for the best research project (Terence Ryan prize), and for the best work in STI medicine (Michael Waugh



Professors Henning Grossman and John Masenga in the Regional Dermatology Training Centre (RDTC) library.



The new Herbert Stiefel dermatology ward at the Kilimanjaro Christian Medical Centre (KCMC).

prize). A second training programme (MMed) provides 4-year specialist training in dermato-venereology for junior doctors, which is now a training pathway recognised for specialist accreditation in dermatology by several African countries. It includes the completion and submission of a research project, some of which have been published.<sup>[4]</sup> The latest African country to provide medical trainees for this programme is Malawi, a country currently without a specialist dermatologist. An objective of the course is helping the integration of dermatological care between the dermatology clinical officers and specialist dermatologists. The RDTC is housed in a building designed to include clinic space, training rooms and laboratory areas. With time, other facilities such as a library, a pharmaceutical compounding unit,<sup>[5]</sup> a student hostel, and living accommodation for visiting teaching faculty have been added to the site.

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The first director of the RDTC was Professor Henning Grossman, who was succeeded by Professor John Masenga. Together they have established a service and training programme covering all aspects of dermato-venereology. They were assisted by visiting teaching faculty and a strong and expanding local team, which has allowed the development of specific initiatives such as a regional albino programme. Visiting faculty often make significant contributions to the life and direction of the centre.<sup>[6]</sup> One of the latest projects is the construction of an inpatient ward, which will be linked to other facilities including a burns unit. Donors such as the Barbara Stiefel Foundation provided funding to complete this work. The ward has been built and plans for equipping it are under way. In addition, a new building in the RDTC compound for training albinos in the local preparation of sunscreens and in indoor occupations such as



Graduates collecting medical supplies and hats for albino patients.

dressmaking has also been completed. This will provide a focus for the expanding programme to help persons with albinism (PWAs). Kilimanjaro Sun Care Cream is now widely used and the work of the centre in supporting the needs of PWAs has been commended by the Prime Minister of Tanzania at a recent meeting in Dodoma, Tanzania. The albino programme has also benefited from the Hats on for Skin Health initiative, a joint Stiefel/GSK/ILDS project; 2 000 hats have already been distributed to patients with albinism in 6 countries and sufficient funds are available for distributing a further 3 000. This has alerted other donors to the plight of albinos, and work to expand the outreach activities of the RDTC beyond the Arusha area is being developed in collaboration with Rotary International. The RDTC also collaborates with Under the Same Sun, an international non-governmental organisation (NGO) that focuses on albinism.

## Laboratory services

The provision of specialist laboratory services critical for the provision of dermatological care is difficult in an African setting owing to the lack of both technical and professional dermatopathological skills. Dr Beltraminelli (Switzerland) assessed the availability of such skills in sub-Saharan Africa and developed solutions. For instance, in 2013 Dr Kiprono, a former graduate of the RDTC MMed course, with further training in dermato-histopathology, assisted with teaching and reporting at the centre. In mycology, a technician who was trained at the Johns Hopkins Mycology Laboratory has been developing diagnostic procedures and laboratory facilities on site.

## Continuing medical education

Every year in January there is a continuing medical education (CME) event at the RDTC, attended by many former graduates of both the ADDV and MMed courses as well as a large number of participants from other countries - from South Africa to the USA. This 3-day event is an important source of information on dermatology and STIs in a tropical context. The sessions include presentations by past and present students and residents, and on the Saturday after the

CME course there is a meeting of the ADDV graduates' association, the African Dermato-Venereology Officers Association (ADVOA). The occasion of the CME may also provide the focus for other meetings. For instance, in 2012 the Georg Rajka Symposium on atopy and atopic dermatitis was held for the first time in sub-Saharan Africa on the KCMC campus.<sup>[7]</sup>

## Conclusions

What does the future hold? The expansion of the centre has proceeded in a methodical and timely manner. However, it raises important questions. Firstly, the issue of placement of ADDV graduates in situations where they can deploy their skills for the benefit of local or regional communities. Although these are highly trained people, they are not always placed appropriately once they return to their countries or regions. Secondly, there is the issue of fostering a future generation of dermatologists to motivate more young medical graduates to choose a career in dermatology. This objective is not confined to Tanzania, and the IFD and ILDS are working with advisers towards strategies to interest medical students in this field. Identification of role models is a key part of the scheme. The RDTC continues to make a significant impact on local service and regional education

provision, and with foresight and planning can extend this work to reach a wider international constituency in sub-Saharan Africa.

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