

Orang Asli, the IMR, and the Hooper Foundation: a 2007 retrospective.

A. Baer and Q. B. Welch

Part 1 by A. Baer.

The earliest fieldwork collaboration between Orang Asli and the Institute for Medical Research (IMR) in Kuala Lumpur may have been through Lim Boo Liat. Now a noted authority on wildlife, he began working for the IMR as a field biologist in 1947 and, as I recall, worked closely with many young Orang Asli men who functioned as guides, animal trappers, and informants on ecological matters.¹ One of these workers, Sipang b. Ecoin from Bukit Legong, was so informative about Temuan folk literature that Lim Boo Liat wrote a book on the subject, *Orang Asli Animal Tales*. It was originally published both in English and Malay and was recently republished in Malay.² Sipang's biography can be found in the 2004 edition of this book.

In 1971-72 when I lived among Ulu Serendah Temuan in Selangor, Sipang's son, Ulang, showed up one day in the village. That's when I discovered that he had a wife there. Ulang looked almost identical then to Dr. Lim's photo of the young Sipang in the animal-tales book. I long thought that I had never met Sipang until Colin Nicholas pointed out in the 1990s that Sipang was in a family photo I had taken at Bukit Legong in 1972. In addition, when Quentin Welch and I went to the University of California, San Francisco (UCSF) archives in October, 2006 to delve into some IMR history, we found several photos of Bukit Legong taken in the 1960s, one showing Ulang's wife by the kitchen hearth. A 2000 photo of her, with her aged mother, appears on p. 117 in *Orang Asli Women of Malaysia*.³

As an aside to Sipang's story, he lived for a while at Janda Baik in Pahang, a Temuan village where David Labang once had an odd experience. At that time in the 1960s, David, a Kelabit from Bario in Sarawak, was collecting animals for the zoologist Gathorne (Lord) Medway (later, Earl of Cranbrook) who was then on the biology faculty at University Malaya (UM).⁴ At Janda Baik, David happened to learn that the people there had just eaten a large animal that he couldn't identify from their description of it: short-haired, black and white, with a long nose and no horns. Such an animal did not exist in David's Borneo highlands. When he told Gathorne about it, Medway sent him back to retrieve the bones for his osteological collection. David did, but he had to rescue the bones from the proprietary grasp of the village dogs. (There is a tapir story in Dr. Lim's book.) Upon hearing this story several years ago, Colin Nicholas mentioned that the Janda Baik people had just caught another tapir.

Returning to the main topic, many of the Orang Asli employed at the IMR in the 1960s and 70s were Temuan since this group of Orang Asli lives in the vicinity of Kuala Lumpur, as well as scattered well beyond it. For example, in 1971 when I was living for

¹ Lim Boo Liat later received the first PhD granted by Universiti Sains Malaysia, Penang.

² Lim Boo Liat, *Orang Asli Animal Tales*, Eastern Universities Press, Singapore, 1981; *Kisah-kisah haiwan Orang Asli*, Eastern Universities Press, Singapore, 1984, republished by COAC, Subang Jaya, 2004.

³ Published by COAC, Subang Jaya, 2006.

⁴ David Labang is the brother-in-law of Ramy Bulan, the UM law school professor concerned with indigenous land rights both in East and West Malaysia.

several months at Ulu Kuang, I managed to get Suki, the husband of Kapam, my Temuan language teacher, hired as a fieldworker at IMR. He could conveniently travel by bus or bicycle from “suburbia” to Jalan Pahang in Kuala Lumpur where the IMR was located.

Earlier, in the 1960s, Fredrick Dunn benefited Orang Asli scholarship immensely by the ecological information he obtained from many Temuan men and women at Bukit Manchang, as well as from Orang Asli living elsewhere.⁵ Dunn was active in Malaysia for a long time, off and on from 1962 to 1975.⁶

So far I have not mentioned the Hooper Foundation, but it is an important part of this story. It was founded in 1914 in San Francisco for medical research and emphasized tropical diseases after WWII. Dunn, in fact, was affiliated with the Hooper Foundation in the medical school at UCSF. In essence, the Hooper Foundation led a cooperative arrangement between UCSF and IMR, backed mainly by the National Institutes of Health (NIH) but also the Department of Defense in the U. S. This started in 1960 under the direction of the well-known parasitologist, J. Ralph Audy. The arrangement with IMR lasted into the 1970s and then faded away, largely due to lack of funding. There were also four other bi-national associations funded by the NIH in that era.⁷ All of them were initiated to increase American know-how of international health problems that the U. S. kept encountering in its overseas wars.

The Hooper Foundation section of IMR had many foreign research visitors during its lifespan. Many of them were biologists interested in parasitology, especially involving diseases endemic in the region. These included malaria, schistosomiasis, filariasis, intestinal worms and protozoa, and certain viral diseases. For example, since some disease organisms were transmitted by native ectoparasites living on rodents that cause several types of typhus, it was necessary to capture rodents in their forest or farmland habitats for laboratory studies. Orang Asli, being expert at devising animal traps (among other things), were invaluable in this parasite fieldwork.

In general terms, while many Orang Asli men worked for short periods for IMR itself or for the Hooper contingent in Malaysia, none of them were full-time employees as far as I know. Unskilled-labor jobs at the IMR facility seemed to be filled by city people of other ethnic groups. Among the Orang Asli precious few were literate in English or had had substantial schooling, let alone even being aware of job openings at IMR, so the higher-skill jobs there also went to others. Besides that, the Orang Asli may not have been interested in “indoor” work. One outdoor job employing Orang Asli was the construction and maintenance of the aerial walkway in the Temuan forest at Bukit Lanjan (now an unnatural “development” complex on the outskirts of Kuala Lumpur), but I do not know how much Hooper field biologists were involved in this project.

⁵ F. L. Dunn. *Rainforest Collectors and Traders*, Monograph No. 5, Malaysian Branch Royal Asiatic Society, Kuala Lumpur, 1975, reissued 1982.

⁶ Personal communication, October, 2006.

⁷ They were called ICMRTs, International Centers for Medical Research and Training, based on the International Health Research Act of the U. S. Congress in 1960. Besides UCSF/Malaysia, these were Johns Hopkins/Calcutta; Tulane/Cali, Columbia; Louisiana State/Costa Rica; and University of Maryland/Lahore. Centers received an average of \$500,000 per year during each 5-year, renewable grant period. The program was discontinued in 1979. Accessed on Feb. 15, 2007:

<http://www.developmentstrategies.org/Archives/NAStropDiseases/>

In addition to parasitology, the Hooper office at IMR long hosted a section on “Blood genetics,” headed by Lie-Injo Luang Eng, who was called “Tjie” by everyone.⁸ She was a physician originally from Indonesia and was knowledgeable about a variety of inherited diseases of the human blood system. Her parasitologist husband, Lie Kian Joe, was then the head of Hooper work in Malaysia.

Hooper at IMR also hosted social scientists or bio-social ones. They studied nutrition, anthropology, psychology, and other matters, often on Malays.⁹ Some, however, studied Orang Asli exclusively. Alan Fix, then a doctoral student, worked with Tjie studying the Semai and later Quentin Welch worked with her to study several Orang Asli groups.¹⁰ In 1971-72 I worked with her on Temuan. Allan Lewis, a Canadian MD working for Hooper in 1971-72, was assigned to the Orang Asli Hospital at Gombak and collaborated with Tjie and myself on malaria studies of Temuan living at Tekir Labu and Ayer Baning in the state of Negri Sembilan.

Hooper and IMR often collaborated with other entities in their work.¹¹ At the IMR when I was there in 1971-72, the US Army had a Hooper-associated medical research unit (USAMRU) staffed by Al Rudnick (dengue studies), Tim Dondero (malaria, filariasis), and others.¹² Some of their work involved employing Orang Asli fieldworkers or testing Orang Asli villagers for disease organisms. In addition, Hooper people collaborated with the medical staff at the Orang Asli Hospital in Gombak to study and diagnose health problems. Notably, Tjie co-published with J. Malcolm Bolton, head of the hospital, but other fruitful collaborations also occurred on Orang Asli health issues. The Allan Lewis study I mentioned above also involved people from the IMR malaria division who did laboratory identification of malarial parasites; they also did this for my studies on the Temuan in Selangor state.

When I joined the Lewis cavalcade to Tekir Labu, I brought along several teenage boys from my home village of Ulu Serendah who took careful note of the teenage girls at Labu. Our Serendah group stayed overnight at Labu in a vacant government-build house, peacefully until 4 AM. Then, on the mistaken belief that I was a medical doctor, a village family called me out to their house to solve the problem of a retained placenta following birthing. After much discussion about why I would not drive the new mother to Gombak Hospital (maybe she would die en route), I finally got agreement to fetch the government midwife for the area, a prim Malay woman who didn't seem elated by me knocking on

⁸ Her obituary notice, which says little about Malaysia, is: Yuet Wai Kan, In memory of Luang Eng Lie-Injo, M. D., Ph. D., D. T. M. and H. (1918-1989). *American Journal of Human Genetics* 45: 976, 1989. Tjie was affiliated with Hooper starting in 1960 (in San Francisco) but was located at IMR starting in 1964 when her husband took on the management of Hooper in Malaysia. She returned to San Francisco in 1973. Tjie, unlike other Hooper employees in Malaysia, was largely funded by her own NIH grants. Visitors like myself were not paid employees.

⁹ One of these was the anthropologist Ronald Provencher who later was a faculty member at Northern Illinois State University; he, in fact, introduced me to the Ulu Kuang Temuan. Another was Anthony Coulson, who studied Malay folk medicine and rural health; he was later on the faculty of the University of Houston (see A. Coulson, A model for a comprehensive low cost health program in rural Malaysia. *Medical Anthropology Newsletter* 7 (4): 13-18, 1976).

¹⁰ Semai, like Temuan, is the name of a particular Orang Asli ethnolinguistic group.

¹¹ For example, for a schistosomiasis study on Orang Asli in 1978 the research team had two members from Gombak, one from University Malaya, two from IMR, and two from Hooper, according to ICMRT reports.

¹² Dondero was at IMR Nov., 1969 up to Jan., 1973, as I recall; later he was at the Center for Disease Control in Georgia. He once made some urgent deliveries to Ulu Serendah for me when I was away.

her door at 6:30 AM. But by 8 AM, after donning her starched uniform, she took charge of the birth scene effectively. Both mother and child survived.

Tekir Labu was a new kind of Temuan village for me. Half of it was run by the Jenang and the other half, somewhat removed, by the Batin. Half was Christian and half was not, but I don't remember which was which.¹³

On the subject of malaria studies, I had an aerosol can of mosquito repellent on a shelf in my Temuan-built house at Ulu Serendah. I discovered it was empty one day when a gaggle of village boys and girls, who had no school to go to, were looking at picture books in the house. They said that they had all put the "hairspray" on their hair. They had invented a new approach to deterring pesky mosquitoes!

When Malcolm Bolton started the Gombak Hospital he was the only MD there, but a retired American MD arrived in June, 1963 as a Peace Corps Volunteer (PCV).¹⁴ This was Elizabeth Cole, who was well-regarded at Gombak. Her arrival had a positive feedback effect on Orang Asli research because it freed up Malcolm Bolton to collaborate with Fred Dunn on his studies of intestinal parasites (helminths).¹⁵ Also in the 1960s, Robert Wolff, a Dutch PhD born in Indonesia, worked at Hooper studying the acceptance of western medicine in Semai and Malay villages.¹⁶

In 1964, Elizabeth Cole's successor at Gombak was the Canadian MD, Gary Goldthorpe, who was supported there by Care/Medico.¹⁷ He was there from August, 1964 to April, 1965 and had been a Medical and Health Officer at Temerloh in Pahang state the previous year. Goldthorpe, a friend of Shuichi Nagata and Hoe Ban Seng in Canada, has long been a backer of Orang Asli, including helping to fund Juli Edo's studies in Australia. He met Colin Nicholas at a medical-staff reunion held at Gombak in 1993. Goldthorpe has also long admired the late Malcolm Bolton, about whom he recently wrote, "Bolton was unique...and made all our work possible, became a dear friend to many of us [and] was a tireless supporter and promoter of the aborigines."¹⁸

I myself occasionally visited Gombak in 1971-72, to visit patients I knew, to transport Temuan to and fro, and once to check all available Temuan medical records. This plan was doomed to failure because at that time the hospital records were stored in seemingly random dis-order. I hope they have a functional filing system by now.

Hooper also had a few graduate students on its staff in Malaysia. J. G. Dobbins worked on filariasis in 1973-75 and studied Malay-village demography and also that of the Tasek Bera Semelai (Orang Asli) population in 1976. He, or perhaps she, seems not to have finished any graduate program at UC Berkeley or at UCSF.¹⁹

¹³ The Batin was Christian and had a Christian wedding in 1950; he was also the village teacher and is still alive today (personal communication from C. Nicholas, February 19, 2007).

¹⁴ In 1962 it was only a 100-bed hospital.

¹⁵ F. L. Dunn and J. M. Bolton. The MIF direct smear method in the study of intestinal parasitism in Malayan aborigines. *Singapore Medical Journal* 4: 175-176, 1963.

¹⁶ I sent an excerpt of Wolff's 1963 ICMRT report, which I obtained from the UCSF archives, as an email attachment to orangasli@yahogroups.com on Nov. 3, 2006.

¹⁷ For a report on another Care-Medico project, in Kluang, Johore, see: V. Neufeld. The Canadian CARE-MEDICO team in Malaysia. *Canadian Medical Association Journal* 93 (25): 1310-1312, 1965. CARE was an acronym originally for Cooperative for American Relief Everywhere.

¹⁸ Personal communication: letter of November 2, 2006.

¹⁹ Dunn had no information on Dobbins in 2006.

The one biomedical report by an Orang Asli, Onyah b. Itam, was on filariasis at Gombak, but he may have had an IMR or USAMRU connection for this work.²⁰ His son certainly had a connection with IMR. He was employed by Mak Jun Wah as a laboratory technician there in the 1990s. When I mentioned his father's paper to him, he was surprised. His had never known his father had written a scientific paper.

In retrospect, it is notable that in the 1960s and 70s, all the work on Orang Asli by foreigners that I have mentioned was done with the approval of the Department of Aborigines, or JOA as it was then called. No one had any difficulty in obtaining JOA consent; in fact, its employees—quite a few of them Orang Asli themselves—were at worst indifferent and at best helpful. In addition, one or more of the Hooper people worked under the official sponsorship of the dean of the new Faculty of Medicine at the University of Malaya, which was started in 1967. Rudnick was one of these, as I recall, and while he did little work on Orang Asli, he employed them in his field studies of dengue virus in forest primates.²¹

What, one might ask, did the Hooper-related researchers find out about Orang Asli health? As a perusal of the literature shows, they documented stressful conditions due to infectious diseases, malnutrition, and loss of living space, a situation that is hardly better and in important respects is unconscionably much worse today. For years after Hooper left Malaysia, Orang Asli health was little studied there. With only a few exceptions, it has remained a disregarded area of study and concern up to this day—an “orphan” of neglect.

Part 2 by Q. B. Welch.

My initial response to Dr. Baer's request of 6/2006 was the typical litany of excuses, including not knowing much about Hooper history or any of the people except those around Kuala Lumpur during the approximately two and a half years I spent in Malaysia (late 1970-August, 1973). In part, this sojourn occurred because I was the beneficiary of the very helpful kindness of Dr. Luan Eng Lie-Injo (Tjie) and various Hooper people to add me to their staff in Kuala Lumpur, even though I had never interviewed or met anyone at Hooper either in San Francisco or Malaysia.

My assignment was originally with the University of Maryland ICMRT in Lahore, Pakistan to study normal human genetic variation and collaborate with the scientists in the mosquito genetics projects there. However, a variety of difficulties seemed to beset this endeavor, and after about six months arrangements were made for me to relocate to the ICMRT affiliated with UCSF in Kuala Lumpur. I was very grateful to all involved (I don't know who all that might have been) for providing me another chance to do some research in human population genetics after the original plan was turning disastrous.

As it turned out, this was a wonderful break for me. I then had the opportunity to work in a lab already functioning in detecting genetic variants, albeit associated with

²⁰ Onyah b. Itam. Filariasis among Malayan aborigines examined at Gombak Hospital during the period 1961-1966. *Medical Journal of Malaysia* 21: 384-385, 1967.

²¹ R. Dewey and A. Rudnick. An Orang Asli blowpipe with a syringe-type dart for the live capture of wild primates in Malaysia. *Southeast Asian Journal of Tropical Medicine and Public Health* 4 (2): 285, 1973; A. Rudnick et al., eds. *Dengue Fever Studies in Malaysia*. Institute of Medical Research, Kuala Lumpur, 1986.

human diseases. Even though the emphasis was on finding “abnormal” genetic variants and my interest was on normal human variation at that time, many of the techniques used by Tjie were equally applicable to both ends. Thus, instead of a frustrating and possibly fruitless endeavor, I now had the opportunity to work in a lab with a very knowledgeable, skilled, and productive researcher in “blood genetics,” as Tjie termed her field.

Her laboratory was already up and running and she had various local collaborators, very important for overall success of such work. In addition, Malaysians are wonderfully diverse genetically (Malay, Chinese, Indian, several Orang Asli groups) so that a population geneticist interested in normal genetic variation could not have hoped for a better assignment.

This assignment turned out to be scientifically productive and extremely enjoyable and educational personally. I was able to conduct successful expeditions into the jungle, obtaining blood samples and other data from the Orang Asli who lived there.

Based at least in part on the work done in Malaysia, I authored or co-authored some 15 papers in refereed journals, as well as various other reports. Perhaps some other research may have also been furthered in some way by my endeavors.

To insert some more personal remarks here, due to some personal circumstances with which I was unable to cope adequately for quite some time, I was unable to do much in population genetics research after leaving Malaysia. However, I did go on to an interesting, challenging, and rewarding career in management and applied statistical research in a large city Public Health Department.

From this perspective of years later, it is clear that Tjie was among the best supervisors I ever had. I regret not having said that to her and certainly had a profound sense of loss when learning of her death some time after it occurred. She was very knowledgeable, widely competent, and hard-working with considerable accomplishments, but not arrogant. If I had some technical or other problem, discussion with her would usually lead to a solution.