

Isolated from tsetse in Kiboko, Kenya, in 1969/70 (Goedbloed et al 1973) and preserved after 3–11 passages in mice.

I don't have a record of the passage history from Goedbloed preservation through to its designation as TREU 927 in Turner et al 1990.

TREU 927

First reference to 927 cloning is Turner et al 1990, where its ancestral name was given as GPAL/KE/70/EATRO 1534, but details of 927 derivation are not given until van Deursen et al 2001, who imply that it was cloned after about 12 passages from the fly. They cite Turner & Barry 1989 for its properties of being pleomorphic chronic and fly-transmissible.

TREU 927/4

27 2–3-d passages in mice to make more virulent, then cloned

GUTat 10.1

Transfer to and limited propagation by John Donelson and Sara Melville

van Deursen, et al, culture/manipulation

GUTat 10.1

DNA from this clone was used for genome sequencing at Sanger and TIGR

Details awaiting resolution of possible strain mixup (see below)

Scott Landfear's lab derived procyclics from a rat infected with cells from Donelson. They were cultured as procyclics for about 1 month, total: probably about 2 weeks growing well.

PROCYCLICS

We got these and froze samples in September 2005

PROCYCLICS

December 2005: Mike Turner verified these procyclics are true 927.

First paper citing origin (1) of TREU 927 is MacLeod 1999 (2). Goedbloed et al (1) got 13 stabilates after 3–11 passages of metacyclics from far more dissected flies. They were given K (Kiboko) numbers. One possible problem is that (2) lists 17 K lines, and the TREU numbers subsequently given to them do not show any relation to the original K numbers, although this is almost certainly unimportant. I can only guess that the extra 4 isolates were also made from infected salivary glands after those reported in (1).

The stocks MacCleod et al (1999) started with were uncloned, but they said they cloned them, but this must have been much earlier because Turner et al (3) is the first time a cloned stock (TREU 927/4) is mentioned. In his email of 2/2/6, Mike said that the evidence that it is actually cloned is in MacLeod (2) figure 3. Turner (3) also gives the 927 pseudonyms (supposedly indicating the full history) of GPAL/KE/70/EATRO1534. I just figured out that GPAL probably refers to *Glossina pallidipes*, in contradiction to Lumsden's edicts about naming isolates (5, 6).

The first reference (CMRT 2/2/6 email) to the GUTat 10.1 (predominant VSG) subline of 927/4 used for the genome sequencing project is (4), which gives a wildly incorrect & uninformative citation for the origin. 927/4 was given 27 2–3d mouse passages then recloned (10.1), to obtain a more virulent and antigenically stable line (4). I assume this animal-grown population is what was used for DNA isolation for the genome project. This line initially grew to only 5×10^5 /ml in culture (4) but after passage in vitro for 4 months they could reach 3×10^6 /ml. BUT there is now some question of whether the final derived tetR line in (4) is 927 (CMRT emails November 2005 through January 2006). Mike did confirm that DNA we sent from the 927 procyclics we got from Scott Landfear lab who got them from Donelson as BF are true 927.

1 **Goedbloed, E., G. S. Ligthart, D. M. Minter, A. J. Wilson, F. K. Dar, and J. Paris.** 1973. Serological studies of trypanosomiasis in East Africa. II. Comparisons of antigenic types of *Trypanosoma brucei* subgroup organisms isolated from wild tsetse flies. *Ann Trop Med Parasitol* **67**:31-43.

2 **MacLeod, A., C. M. R. Turner, and A. Tait.** 1999. A high level of mixed *Trypanosoma brucei* infections in tsetse flies detected by three hypervariable minisatellites. *Molecular & Biochemical Parasitology* **102**:237-248.

3 **Turner, C. M. R., J. Sternberg, N. Buchanan, E. Smith, G. Hide, and A. Tait.** 1990. Evidence that the mechanism of gene exchange in *Trypanosoma brucei* involves meiosis and syngamy. *Parasitology* **101**:377-386.

4 **van Deursen, F. J., S. K. Shahi, C. M. R. Turner, C. Hartmann, C. Guerra-Giraldez, K. R. Matthews, and C. E. Clayton.** 2001. Characterisation of the growth and differentiation in vivo and in vitro of bloodstream-form *Trypanosoma brucei* strain TREU 927. *Mol. Biochem. Parasitol.* **112**:163-171.

5 **Anonymous.** 1978. Proposals for the nomenclature of salivarian trypanosomes and for the maintenance of reference collections. *Bull. World Health Org.* **56**:467-480.

6 **Lumsden, W. H. R., and D. S. Ketteridge.** 1979. Characterization, nomenclature and maintenance of Salivarian trypanosomes. p. 693-721. *In* W. H. R. Lumsden, and D. A. Evans (eds.), *Biology of the Kinetoplastida Volume 2.* Academic Press, London.