

## EDITORIAL

## Vampires, blood and wine



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*'Between me and the moonlight flitted a great bat, coming and going in great, whirling circles.'*

Mina Murray's journal in the novel 'Dracula' by Bram Stoker.

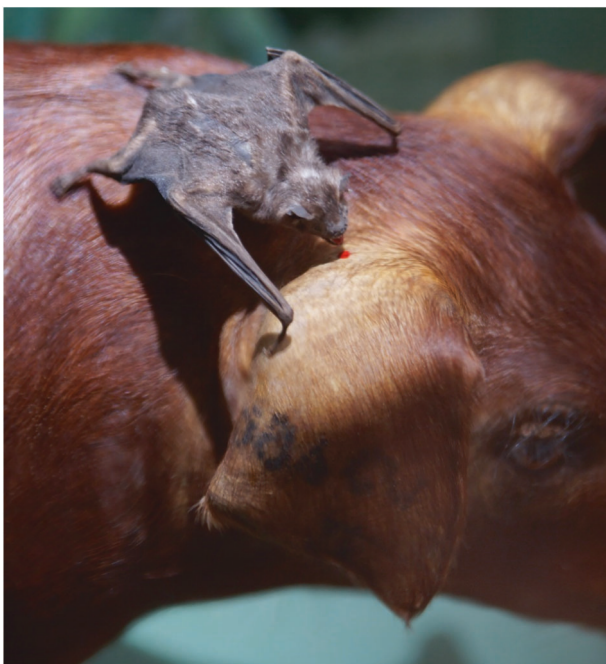
I have alluded previously to the myth of vampires requiring human blood to persist in their 'undead' state. The myth became popular following the publication of Bram Stoker's novel 'Dracula'. Certain animals, notably vampire bats, have a requirement for regular ingestion of animal and occasionally human blood [Fig. 1]. Vampire bats, which live in parts of central and south America, are believed to suck blood from sleeping mammals. These bats are equipped with very sensitive thermoreceptors in their noses which helps to locate blood vessels close to their victim's skin. They can walk, jump, and run and only hunt in the dark. They apparently use infra-red radiation to locate blood hotspots on their prey. They also have very sharp incisor teeth but, importantly,

their saliva contains substances which activate plasminogen and causes local fibrinolysis so rather than sucking blood they lap up the freely flowing liquid.

Like other creatures [1] e.g., leeches, this observation can be put to medical uses. Plasminogen is the zymogen (pro-enzyme) of plasmin, the major enzyme that degrades fibrin clots. Plasminogen activators, tPA, and recombinant plasminogen activators, r-tPA, have been used in the treatment of ischaemic stroke and myocardial infarction [2]. The use of r-tPA in the treatment of stroke is not without potential risk. It is probably wise if these agents are only used in specialised centres by experienced physicians. Although humans are rarely bitten by vampire bats it seems that transmission of rabies is a potential problem.

My attention was captured recently by an article by Ella McSweeney [3] writing about barn owls. These beautiful birds were facing extinction in many countries but now happily are making a comeback. What interested me was that these birds live on small nocturnal animals and according to McSweeney, they do not drink water but rely on the blood of their prey for moisture.

The connection between blood and wine has been alluded to previously [4] and the best example of this is the 'L'Ultima Cena fresco by Leonardo da Vinci in Santa Maria delle Grazie in Milan. There are numerous examples of frescoes depicting The Last Supper but the restoration of Plautilla Nelli's [1524–1588] painting



**Fig. 1** A Common Vampire Vampire Bat (*Desmodus rotundus*), feeding on an animal. Showcase of taxidermied animals. Natural History Museum, Vienna, Austria. Wikipedia, Creative Commons Attribution 3.0 unported license.



**Fig. 2** L'Ultima Cena. L'Ultima Cena (The Last Supper) by Plautilla Nelli (1524–1588). In the Museum beside the church of Santa Maria Novella, Florence, Italy.



**Fig. 3** Stemless wine glass. Stemless wine glass by Riedel.

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deserves mention for several reasons. It was discovered and recently restored by Advancing Women Artists founded by Jane Fortune [Fig. 2]. The painting is over 7 metres long and although Nelli was popular in her time, like many artists (not all women), she seems to have fallen off the perch until recently. The restored painting is now on view in the Museum of Santa Maria Novella in Florence (beside the church).


On looking closer at Nelli's painting some of the wine glasses on the table are stemless, somewhat like wine glasses that are now back in vogue [Fig. 3]. I dislike these types of wine glasses as they are prone to finger marks and white wine rapidly increases in temperature while being consumed. Vessels from which to consume wine have gone through many iterations over time including baked clay goblets, timber and bronze tankards, pottery goblets animal horns and leather drinking vessels [5]. Needless to say, our old friend Pliny the Elder (Gaius Plinius Secundus) had something to say about the suitability of glass vessels for wine drinking in *Naturalis Historiae*: 'for drinking vessels glass has superseded the use of gold and silver'. He also had opinions on everything from javelin throwing to the treatment of haemorrhoids! The popularity of a drinking vessel with a bowl, stem, and base was a medieval invention and then in 1455 Angelo Barvoier developed clear glass (cristallo, Venetian crystal) for drinking vessels in Venice, Italy.

Riedel (founded in 1756 in Austria) is probably the best-known wine glass-making company today. Although I often use wine glasses made by them, I must confess that the manufacture and sale of a different wine glass for wine made from individual grapes seems a little over the top (OTT). The re-introduction of the stemless wine goblet seems regressive, for reasons already mentioned. The bowl of a wine glass should be narrower at the top than the base and the shape should be somewhat like a tulip. The use of wine glasses with an angulated bowl is particularly irritating. Of course, fashions change and the champagne glasses (supposedly modelled on Marie Antionette's breasts) have now almost universally been replaced by flutes. Some people like to swirl red wine in their glass in order to release polyphenols and tannins. It always seems a little pretentious to me but if you persist in this practise, I recommend placing the wine glass on a firm surface otherwise you run the risk of the wine shooting out of the glass onto your shirt. Lastly, and most irritatingly, waiters often say: 'I'll remove the cork and let the wine breath for a few

minutes'. Nothing could be so silly! If you really want to increase the contact between the wine and oxygen, then the wine should be decanted a few hours before drinking. The amount of contact between wine in a bottle from which the cork has been removed is almost zero, making the statement: 'I'll let the wine breath', meaningless.

Whatever vessel you use make sure you enjoy your wine,

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## COMPETING INTERESTS

The author declares no competing interests.

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