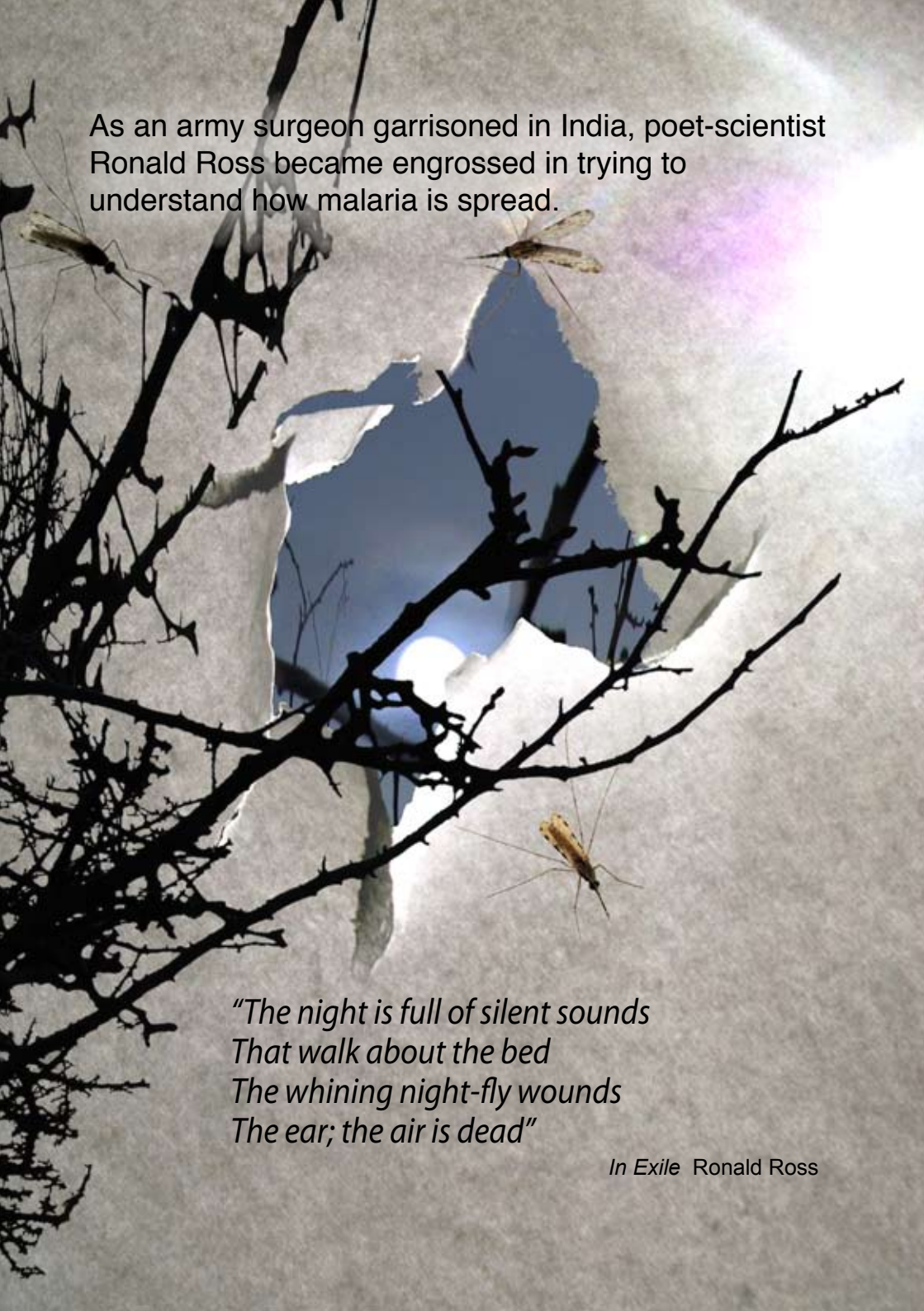


# Mosquito Night



A new performance project by Christine Watkins

*Anopheles stephensi* in flight | Hugh Sturrock/Wellcome Images




As an army surgeon garrisoned in India, poet-scientist Ronald Ross became engrossed in trying to understand how malaria is spread.

*"The night is full of silent sounds  
That walk about the bed  
The whining night-fly wounds  
The ear; the air is dead"*

*In Exile Ronald Ross*

He spent years working in discouraging conditions, minutely documenting his dissections in his scientific notebooks by day and writing long verse sequences at night to explore the inner landscape of his search.



*"I go through the entire batch of mosquitoes until only one remains..."*

*I go carefully through the tissues now so familiar to me, searching every micron with the same passion and care as one would search some vast ruined palace for a little hidden treasure..."*

*Memoirs Ronald Ross*

# Mosquito Day

*This day relenting God  
Has placed within my hand  
A wondrous thing; and God  
Be praised. At His command,*

*Seeking His secret deeds  
With tears and toiling breath  
I find thy cunning seeds,  
O million-murdering Death.*

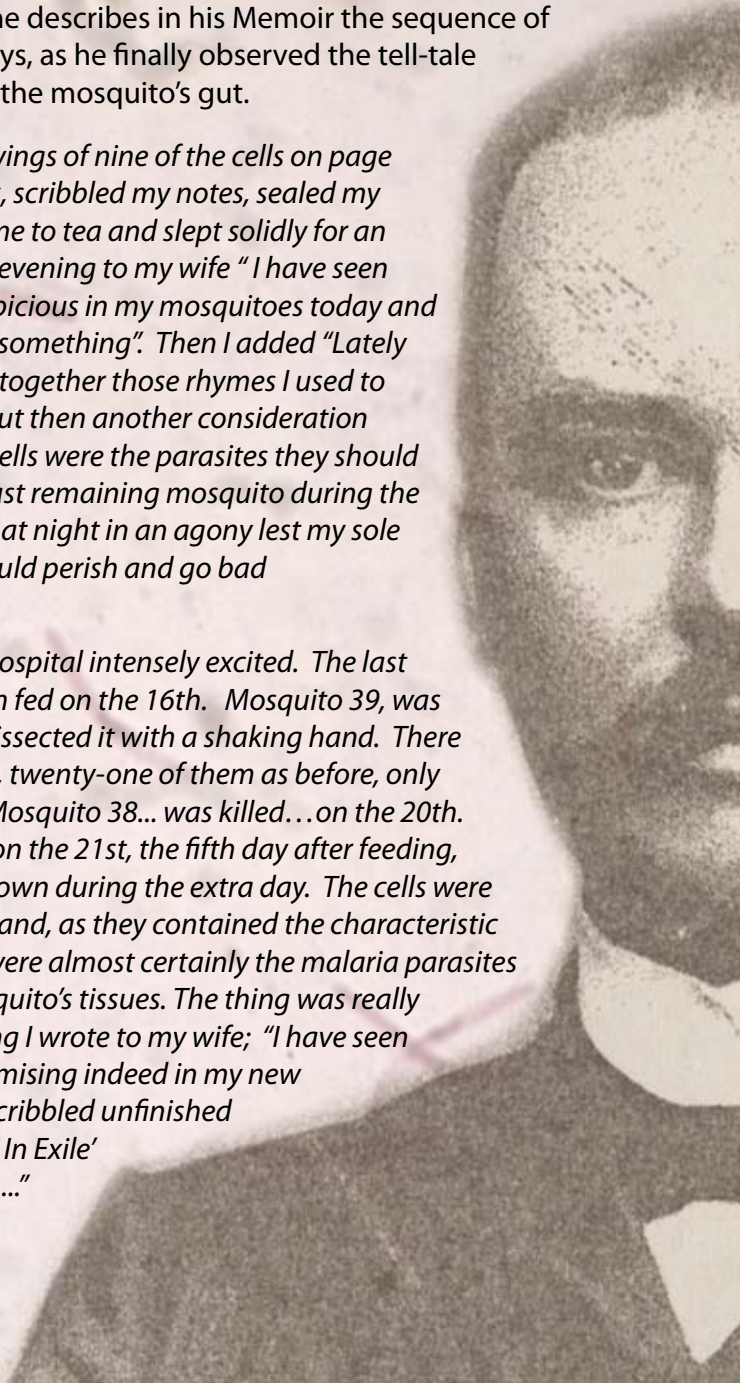
*I know this little thing  
A myriad men will save.  
O Death, where is thy sting,  
Thy victory, O Grave!*



Ross made his key discovery on 20th and 21st of August 1897 and wrote his poem marking the discovery on the evening of the 21st. Here is how he describes in his Memoir the sequence of events on those days, as he finally observed the tell-tale pigmented cells in the mosquito's gut.

*"I made rough drawings of nine of the cells on page 107 of my notebook, scribbled my notes, sealed my specimen, went home to tea and slept solidly for an hour... I wrote that evening to my wife "I have seen something very suspicious in my mosquitoes today and hope it may lead to something". Then I added "Lately I have been putting together those rhymes I used to make on 'Exile'..." But then another consideration struck me. If these cells were the parasites they should grow in size in the last remaining mosquito during the night: and I spent that night in an agony lest my sole surviving friend should perish and go bad before morning!*

*Next day I went to hospital intensely excited. The last survivor of the batch fed on the 16th. Mosquito 39, was alive... I slew and dissected it with a shaking hand. There were the cells again, twenty-one of them as before, only now much larger! Mosquito 38... was killed... on the 20th. This one was killed on the 21st, the fifth day after feeding, and the cells had grown during the extra day. The cells were therefore parasites, and, as they contained the characteristic malarial pigment, were almost certainly the malaria parasites growing in the mosquito's tissues. The thing was really done.... That evening I wrote to my wife; "I have seen something very promising indeed in my new mosquitoes" and I scribbled unfinished verses in one of my 'In Exile' notebooks in pencil..."*



# The Performance: A collaboration between writer Christine Watkins...

*"Dapple Wing is a subtle and resourceful creature. Conviction fills her mind when she is inclined to despond...*

*...she is patrolling, patrolling the borderland between the light sleep and the deep so that you don't know if you should allow yourself to relax into the gentle sweet soft slumber, say to yourself let go, drift, set sail again into Mosquito Night"*

**Mosquito Night** combines a choral song cycle, lecture format and extracts from Ross's scientific notebooks and poetry in a new performance text.

**In performance, Ross's own multi-layered exploration process extends forward into an overview of the contemporary struggle against malaria.**



Christine Watkins has had work commissioned by The British Film Institute, Welsh National Opera and many theatre companies. The Mosquito Night project reflects her interest in the interconnecting pathways of art and science.

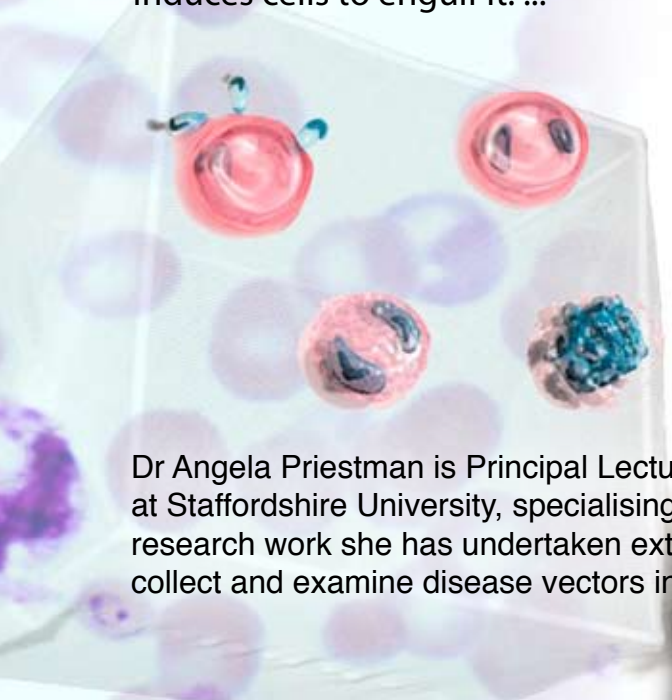
... and biologist Angela Priestman

“Where would Ross’s attention be if he was involved in malaria research today?

...it’s likely he would be heading a team that has replaced microscopes with computers to search the Anopheles and Plasmodium genomes for clues.

Or maybe he would be examining how the immune system responds to this clever parasite that moves from cell to cell and in and out of the blood, and changes its surface and induces cells to engulf it. ...”

Dr Angela Priestman is Principal Lecturer in Biological Sciences at Staffordshire University, specialising in parasitology. In her research work she has undertaken extensive travel to Africa to collect and examine disease vectors in the wild.





um coc - i - di um  
coc - i - di - um coc - i - di - um

ed rath - er loose - ly by Ross in his let - ters  
rath - er loose - ly by Ross in his let - ters  
m - ther loose - ly by Ross in his let - ters

Blast - o - phore Blast - o - phore  
Blast - o - phore Blast - o - phore  
Blast - o - phore Blast - o - phore

The image shows a musical score for a piece titled 'Cocci-dium'. It features a vocal line with lyrics and a piano accompaniment. The lyrics include 'um coc - i - di um', 'coc - i - di - um coc - i - di - um', 'ed rath - er loose - ly by Ross in his let - ters', 'rath - er loose - ly by Ross in his let - ters', 'm - ther loose - ly by Ross in his let - ters', and 'Blast - o - phore'. The score is written on a grand staff with a treble clef and a key signature of one flat.

Mary Keith is a composer and musical magpie, passionate about the power of the voice as a musical and communicative tool. Her work to date includes writing numerous choral scores, amongst them scores for three Greek tragedies for Foursight Theatre, performing Bulgarian love songs on Womans' Hour, and working as Musical Director for "Thatcher; The Musical!"

She has composed Mosquito Night's cycle of ten songs especially for The Voice Squad, to texts/lyrics by Ronald Ross and Christine Watkins.



Emily Campbell is based in Stoke-on-Trent. Much of her work is specific to site and focuses on the viewer's relationship with space. This has included permanent public art works in a variety of spaces from parks to health centres.

Her Mosquito Night Floor can be visited outside performance times, the viewer entering the world of poet-scientist Ronald Ross and his search for the elusive mosquito-malaria connection.

It is accompanied by a soundpiece compiled by Richard Urbanski from interviews and sounds recorded at the London School of Hygiene and Tropical Medicine.



## The Voice Squad

The Voice Squad aim to increase interest and participation in singing by producing hard-edged, high-quality sounds that may appeal to young people as an alternative to the typical styles of singing to which they are exposed elsewhere.

Mosquito Night is the first song cycle they've had composed especially for them - and it's their first performance with a scientific theme!

The Voice Squad is run by Neil Pigott and Alison Houlbrooke with the support of The Music Pool.

**The Music Pool is the community music charity for Herefordshire and its borders and is run by Rob Strawson (Director) and Dennis Schiavon (Administrator).**





Taking part in Mosquito Night with Christine Watkins and Angela Priestman are

Cherry Addison  
Francis Clegg  
Benj Crawford-Sharpe  
Thomas Crawford-Sharpe  
Fionnhula Doran  
Hannah Goodsir  
Rose Hardy  
Ruth Hardy  
Alison Houlbrooke  
Emerald Johnson  
Melissa Johnson  
Sandie Middleton  
Lizzie Murphy

Chris North  
Beth Olivier  
Neil Pigott  
Rosy Pigott  
Georgia Rowan  
Rosie Saady-Saunders  
Freyja Sage  
Harriet Thielker  
Lily Urbanska  
Jeremy Waterfield  
Fran Whitfield  
Grace Whitfield  
Anna Wratten

*"Night comes  
Maybe one, two, three in the morning  
Oh that strange song they sing..."*



The MOSQUITO NIGHT project has been made possible  
by an Arts Award from the Wellcome Trust

To accompany the project we have produced a website  
containing further information about the performance  
(including downloadable songs/texts), the history of  
humanity's understanding of malaria, the interlinked  
pathways of art and science and suggestions for  
further research/investigation.

[www.mosquitonight.info](http://www.mosquitonight.info)



Wellcome Images

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