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Scots in solution to malaria riddle

MALARIA parasites are skilled survivors, developing sophisticated strategies to fight off rival infections, Scottish scientists have found.

New research has shed light on the ability of the disease to thrive in the human body.

Malaria, which is spread by mosquito bites, kills around one million people every year and accounts for one in five of all child deaths in Africa.

The study by a team at the University of Edinburgh has found its virulent nature owes much to the parasites' competitive streak.

When they enter the bloodstream of their victims, they alter their plan of attack if they face competition from other, competing, strains of the infection and focus on producing cells that replicate quickly to cause infection, rather than cells capable of being taken up by a feeding mosquito and spreading the disease.

Laura Pollitt of the School of Biological Sciences said: "Our results explain a long-standing puzzle of parasite behaviour. We found that when parasites compete with each other, they respond with a sophisticated strategy to safeguard their long-term survival.

"They opt to fight it out in the bloodstream rather than risk everything on the chance of infecting mosquitoes in the short term."

The research was published in the American Naturalist and funders included the Wellcome Trust.

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