

1. Record Nr.	UNINA9910830578003321
Titolo	Molecular Approaches to Malaria // edited by Irwin W. Sherman
Pubbl/distr/stampa	Washington, District of Columbia : , : John Wiley & Sons, Inc., , 2014
ISBN	1-68367-190-2
Descrizione fisica	1 online resource (xviii, 542 pages) : illustrations
Disciplina	614.532
Soggetti	Malaria - Molecular aspects Molecular biology Malaria - Treatment
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The life of plasmodium: an overview / I.W. Sherman Plasmo DB / D. Roos -- Making a home for plasmodium post-genomics: ultrastructural organization of the blood stages / L. Bannister, G. Margos and J. Hopkins -- Genetic manipulation of plasmodium falciparum / A. Cowman and B. Crabb -- The transcriptome of the malaria parasite, plasmodium falciparum / K. Le Roch and E. Winzeler -- The plasmodium proteome / J. Johnson and J. Yates -- Evolutionary history and population genetics of human malaria parasites / M. Zilversmit and D. Hartl -- Merozoite / J. Barnwell and M. Galinski -- Ookinete / J. Vinetz -- The sporozoite / R. Sinden and K. Matuschewski -- Gametocytes and gametes / P. Alano and O. Billker -- Molecular approaches to malaria: glycolysis in asexual stage parasites / B. Woodrow and S. Krishna -- The mitochondrion / A. Vaidya -- Trafficking and the TVN / K. Haldar [and others] -- The apicoplast / S. Ralph -- Protein kinases regulating plasmoidum proliferation and development / C. Doerig. -- Proteases and hemoglobin degradation / P. Rosenthal -- Plasmodium lipids: metabolism and function / H. Vial and C. Ben Mamoun -- Plasmodium ribosomes and opportunities for drug intervention / T. McCutchan and I. Sharma -- Oxidative stress and antioxidant defence in malaria parasites / K. Becker, S. Koncarevic, and N. Hunt -- New permeation pathways / S. Thomas and S. Egee -- Molecular aspects of antigenic variation in plasmodium falciparum / P.

Horrocks [and others] -- Mechanisms of drug action and resistance / A. Uhlemann, Y. Yuthavong and D.A. Fidock -- Human genetic determinants of resistance to malaria / B.P. Kwiatkowski and G. Luoni -- Progress in development of a vaccine to aid malaria control / S. Moorthy and F. Dubovsky -- The anopheles gambiae genome / H. Collins and C.A. Hill -- The transcriptome of human malaria vectors / O. Marinotti and A.A. James.

Sommario/riassunto

Provides an overview of the rapid and significant developments that have occurred in malaria research, including the 2002 genome sequencing of *Plasmodium falciparum* and its mosquito vector, *Anopheles gambiae*. The book opens with an introduction to *Plasmodium* molecular biology, followed by several chapters on its genetics and evolution. The remaining five sections examine the intricate host-parasite relationship through comprehensive coverage of invasion and gamete formation; growth and metabolism; immune invasion; protection mechanisms; and the malaria vector.
