

References

1. Sachs, J. and Malaney, P. (2002), The economic and social burden of malaria. *Nature*. **415**, p. 680-685
2. Younis, Y., Douelle, F., Feng, T.-S., *et al.* (2012), 3,5-Diaryl-2-aminopyridines as a Novel Class of Orally Active Antimalarials Demonstrating Single Dose Cure in Mice and Clinical Candidate Potential. *Journal of Medicinal Chemistry*. **55**, p. 3479-3487
3. Alonso, P. L., Brown, G., Arevalo-Herrera, M., Binka, F., Chitnis, C., Collins, F., Doumbo, O. K., Greenwood, B., Hall, B. F., Levine, M. M., Mendis, K., Newman, R. D., Plowe, C. V., Rodríguez, M. H., Sinden, R., Slutsker, L. and Tanner, M. (2011), A Research Agenda to Underpin Malaria Eradication. *PLoS Med*. **8**, p. e1000406
4. Luft, F. C. (2004), Liver stage antigen and malaria. *Journal of molecular medicine*. **82**, p. 555-557
5. Gardiner, D., McCarthy, J. and Trenholme, K. (2005), Malaria in the post-genomics era: light at the end of the tunnel or just another train? *Postgraduate Medical Journal*. **81**, p. 505
6. Nerlich, A. G., Schraut, B., Dittrich, S., Jelinek, T. and Zink, A. R. (2008), *Plasmodium falciparum* in ancient Egypt. *Emerging Infectious Diseases*. **14**, p. 1317
7. Smith, D. C. and Sanford, L. B. (1985), Laveran's germ: the reception and use of a medical discovery. *The American journal of tropical medicine and hygiene*. **34**, p. 2-20
8. Hagan, P. and Chauhan, V. (1997), Ronald Ross and the problem of malaria. *Parasitology Today*. **13**, p. 290-295
9. Shortt, H. E., Fairley, N. H., Covell, G., Shute, P. G. and Garnham, P. C. C. (1949), Pre-erythrocytic Stage of *Plasmodium falciparum*. *British Medical Journal*. **2**, p. 1006-1008
10. Shortt, H. E. and Garnham, P. C. C. (1948), Persisting exo-erythrocytic cycle in *Plasmodium cynomolgi*. *British Medical Journal*. **1**, p. 1225-1228
11. Liu, W., Li, Y., Learn, G. H., Rudicell, R. S., Robertson, J. D., Keele, B. F., Ndjongo, J. B. N., Sanz, C. M., Morgan, D. B. and Locatelli, S. (2010), Origin of the human malaria parasite *Plasmodium falciparum* in gorillas. *Nature*. **467**, p. 420-425
12. Baron, J. M., Higgins, J. M. and Dzik, W. H. (2011), A Revised Timeline for the Origin of *Plasmodium falciparum* as a Human Pathogen. *Journal of Molecular Evolution*, p. 1-8
13. Mota, M. M. and Rodriguez, A. (2001), Migration through host cells by apicomplexan parasites. *Microbes and Infection*. **3**, p. 1123-1128
14. Hay, S. I., Guerra, C. A., Tatem, A. J., Noor, A. M. and Snow, R. W. (2004), The global distribution and population at risk of Malaria: Past, Present, and Future. *The Lancet, Infectious Diseases*. **4**, p. 327-336
15. Ittarat, W., Pickard, A. L., Rattanasinganchan, P., Wilairatana, P., Looareesuwan, S., Emery, K., Low, J., Udomsangpetch, R. and Meshnick, S. R. (2003), Recrudescence in artesunate-treated patients with falciparum malaria is dependent on parasite burden not on parasite factors. *Am J Trop Med Hyg*. **68**, p. 147-152
16. Bronner, U., Divis, P. C. S., Färnert, A. and Singh, B. (2009), Swedish traveller with *Plasmodium knowlesi* malaria after visiting Malaysian Borneo. *Malaria Journal*. **8**, p. 15
17. Collins, W. E. and Jeffery, G. M. (2007), *Plasmodium malariae*: parasite and disease. *Clinical Microbiology Reviews*. **20**, p. 579-592
18. Mueller, I., Zimmerman, P. A. and Reeder, J. C. (2007), *Plasmodium malariae* and *Plasmodium ovale*--the "bashful" malaria parasites. *Trends in Parasitology*. **23**, p. 278-283
19. Guinovart, C., Navia, M., Tanner, M. and Alonso, P. (2006), Malaria: burden of disease. *Current Molecular Medicine*. **6**, p. 137-140
20. Walther H, W. (2012), Global challenges of changing epidemiological patterns of malaria. *Acta Tropica*. **121**, p. 158-165

21. Baird, J. K. (2009), Resistance to therapies for infection by *Plasmodium vivax*. *Clin Microbiol Rev.* **22**, p. 508-534
22. White, N. J. and Imwong, M. (2012) Chapter Two - Relapse. In *Advances in Parasitology* (S.I. Hay, R. P. and Baird, J. K., eds.). pp. 113-150, Academic Press
23. White, N. (2011), Determinants of relapse periodicity in *Plasmodium vivax* malaria. *Malaria Journal.* **10**, p. 297
24. Tjitra, E., Anstey, N. M., Sugiarto, P., Warikar, N., Kenangalem, E., Karyana, M., Lampah, D. A. and Price, R. N. (2008), Multidrug-resistant *Plasmodium vivax* associated with severe and fatal malaria: a prospective study in Papua, Indonesia. *PLoS Medicine.* **5**, p. e128
25. Besansky, N. J., Hill, C. A. and Costantini, C. (2004), No accounting for taste: host preference in malaria vectors. *Trends in Parasitology.* **20**, p. 249-251
26. Koella, J. C. (1999), An evolutionary view of interactions between anopheline mosquitoes and malaria parasites *Microbes and Infection.* **1**, p. 303-308
27. Carey, A. F., Wang, G., Su, C. Y., Zwiebel, L. J. and Carlson, J. R. (2010), Odorant reception in the malaria mosquito *Anopheles gambiae*. *Nature.* **464**, p. 66-71
28. Verhulst, N. O., Qiu, Y. T., Beijleveld, H., Maliepaard, C., Knights, D., Schulz, S., Berg-Lyons, D., Lauber, C. L., Verduijn, W. and Haasnoot, G. W. (2011), Composition of Human Skin Microbiota Affects Attractiveness to Malaria Mosquitoes. *PLoS One.* **6**, p. e28991
29. Cowman, A. F. and Crabb, B. S. (2006), Invasion of red blood cells by malaria parasites. *Cell.* **124**, p. 755-766
30. Barnwell, J. W. (2001), Hepatic Kupffer Cells: The portal that permits infection of hepatocytes by malarial sporozoites? *Hepatology.* **33**, p. 1331-1333
31. Centre for Disease Control, http://www.dpd.cdc.gov/dpdx/hTML/ImageLibrary/Malaria_il.htm, 2009-02-25
32. Haldar, K. and Mohandas, N. (2007), Erythrocyte remodeling by malaria parasites. *Current opinion in hematology.* **14**, p. 203
33. Tilley, L., Dixon, M. W. A. and Kirk, K. (2011), The *Plasmodium falciparum*-infected red blood cell. *The International Journal of Biochemistry & Cell Biology.* **43**, p. 839-842
34. Baker, D. A. (2010), Malaria gametocytogenesis. *Molecular and biochemical parasitology.* **172**, p. 57-65
35. Baton, L. A. and Ranford-Cartwright, L. C. (2005), Spreading the seeds of million-murdering death: metamorphoses of malaria in the mosquito. *Trends in Parasitology.* **21**, p. 573-580
36. Clark, I. A. and Cowden, W. B. (2003), The pathophysiology of falciparum malaria. *Pharmacology & Therapeutics.* **99**, p. 221-260
37. Mackintosh, C. L., Beeson, J. G. and Marsh, K. (2004), Clinical features and pathogenesis of severe malaria. *Trends in Parasitology.* **20**, p. 597-603
38. Bloland, P. B. (2001), Drug resistance in malaria (WHO/CDS/CSR/DRS/2001.4). http://whqlibdoc.who.int/hq/2001/WHO_CDS_CSR_DRS_2001.4.pdf, World Health Organization, p. pg. 27
39. World Malaria Report 2011 http://www.who.int/entity/malaria/world_malaria_report_2011/9789241564403_eng.pdf:9789241564403 World Health Organization, Geneva, Switzerland.
40. López, C., Saravia, C., Gomez, A., Hoebcke, J. and Patarroyo, M. A. (2010), Mechanisms of genetically-based resistance to malaria. *Gene.* **467**, p. 1-12
41. Murray, C. J. L., Rosenfeld, L. C., Lim, S. S., Andrews, K. G., Foreman, K. J., Haring, D., Fullman, N., Naghavi, M., Lozano, R. and Lopez, A. D. (2012), Global malaria mortality between 1980 and 2010: a systematic analysis. *The Lancet.* **379**, p. 413-431
42. Gething, P., Patil, A., Smith, D., Guerra, C., Elyazar, I., Johnston, G., Tatem, A. and Hay, S. (2011), A new world malaria map: *Plasmodium falciparum* endemicity in 2010. *Malaria Journal.* **10**, p. 378

43. Tsuji, M. and Zavala, F. (2001), Peptide-based subunit vaccines against pre-erythrocytic stages of malaria parasites. *Molecular Immunology*. **38**, p. 433-442
44. Greenwood, B. M., Fidock, D. A., Kyle, D. E., Kappe, S. H. I., Alonso, P. L., Collins, F. H. and Duffy, P. E. (2008), Malaria: progress, perils, and prospects for eradication. *The Journal of Clinical Investigation*. **118**, p. 1266-1276
45. Sharma, S. and Sulabha, S. (2008), Malaria vaccine: a current perspective. *Journal of Vector Borne Diseases*. **45**, p. 1-20
46. Francis, S. E., Sullivan, D. J. J. and Goldberg, D. E. (1997), Hemoglobin metabolism in the malaria parasite *Plasmodium falciparum*. *Annual Reviews in Microbiology*. **51**, p. 97-123
47. Cohen, J., Nussenzweig, V., Nussenzweig, R., Vekemans, J. and Leach, A. (2010), From the circumsporozoite protein to the RTS, S/AS candidate vaccine. *Human vaccines*. **6**, p. 90
48. Ménard, R., Heussler, V., Yuda, M. and Nussenzweig, V. (2008), *Plasmodium* pre-erythrocytic stages: what's new? *Trends in Parasitology*. **24**, p. 564-569
49. Vekemans, J., Leach, A. and Cohen, J. (2009), Development of the RTS, S/AS malaria candidate vaccine. *Vaccine*. **27**, p. G67-G71
50. Vogel, G. (2012), Disappointing Results Blunt Hopes for Malaria Vaccine. *Science*. **338**, p. 871-872
51. Agnandji, S. T., Lell, B., Fernandes, J. F., Abossolo, B. P., Methogo, B. G. N. O., Kabwende, A. L., Adegnik, A. A. and Mordmüller, B. (2012), A Phase 3 Trial of RTS,S/AS01 Malaria Vaccine in African Infants. *New England Journal of Medicine*. **367**, p. 2284-2295
52. Bongfen, S. E., Ntsama, P. M., Offner, S., Smith, T., Felger, I., Tanner, M., Alonso, P., Nebie, I., Romero, J. F., Silvie, O., Torgler, R. and Corradin, G. (2009), The N-terminal domain of *Plasmodium falciparum* circumsporozoite protein represents a target of protective immunity. *Vaccine*. **27**, p. 328-335
53. Carter, R. (2001), Transmission blocking malaria vaccines. *Vaccine*. **19**, p. 2309-2314
54. Ranson, H., N'Guessan, R., Lines, J., Moiroux, N., Nkuni, Z. and Corbel, V. (2011), Pyrethroid resistance in African anopheline mosquitoes: what are the implications for malaria control? *Trends in Parasitology*. **27**, p. 91-98
55. World Health Organization, Malaria vector control and personal protection: report of a WHO study group. *WHO technical report series; No 936 - ISBN 92 4 120936 4 (ISBN 978 92 4 120936 6)*, p.
56. Okumu, F. O. and Moore, S. J. (2011), Combining indoor residual spraying and insecticide-treated nets for malaria control in Africa: a review of possible outcomes and an outline of suggestions for the future. *Malaria Journal*. **10**, p. 208
57. Dabire, R., Diabate, A., Baldet, T., Pare-Toe, L., Guiguemde, R., Ouedraogo, J.-B. and Skovmand, O. (2006), Personal protection of long lasting insecticide-treated nets in areas of *Anopheles gambiae* s.s. resistance to pyrethroids. *Malaria Journal*. **5**, p. 12
58. Turusov, V., Rakitsky, V. and Tomatis, L. (2002), Dichlorodiphenyltrichloroethane (DDT): ubiquity, persistence, and risks. *Environmental Health Perspectives*. **110**, p. 125
59. Walker, K. (2000), Cost-comparison of DDT and alternative insecticides for malaria control. *Medical and Veterinary Entomology*. **14**, p. 345-354
60. Sadasivaiah, S., Tozan, Y. and Breman, J. G. (2007), Dichlorodiphenyltrichloroethane (DDT) for indoor residual spraying in Africa: how can it be used for malaria control? *The American journal of tropical medicine and hygiene*. **77**, p. 249-263
61. Wong, M., Leung, A., Chan, J. and Choi, M. (2005), A review on the usage of POP pesticides in China, with emphasis on DDT loadings in human milk. *Chemosphere*. **60**, p. 740-752
62. Rogan, W. J. and Chen, A. (2005), Health risks and benefits of bis (4-chlorophenyl)-1, 1, 1-trichloroethane (DDT). *The Lancet*. **366**, p. 763-773

63. Hargreaves, K., Hunt, R. H., Brooke, B. D., Mthembu, J., Weeto, M. M., Awolola, T. S. and Coetzee, M. (2003), Anopheles arabiensis and An. quadriannulatus resistance to DDT in South Africa. *Medical and Veterinary Entomology*. **17**, p. 417-422
64. Takken, W. (2002), Do insecticide-treated bednets have an effect on malaria vectors? *Tropical Medicine and International Health*. **7**, p. 1022-1030
65. Maharaj, R., Mthembu, D. and Sharp, B. (2008), Impact of DDT re-introduction on malaria transmission in KwaZulu-Natal. *South African Medical Journal*. **95**, p. 871
66. Hyde, J. E. (2005), Exploring the folate pathway in *Plasmodium falciparum*. *Acta Tropica*. **95**, p. 191-206
67. Petersen, I., Eastman, R. and Lanzer, M. (2011), Drug-resistant malaria: molecular mechanisms and implications for public health. *FEBS Letters*, p.
68. Hyde, J. E. and Müller, I. B. (2010), Antimalarial drugs: modes of action and mechanisms of parasite resistance. *Future Microbiology*. **5**, p. 1857-1873
69. Le Bras, J. and Durand, R. (2003), The mechanisms of resistance to antimalarial drugs in *Plasmodium falciparum*. *Fundamental & Clinical Pharmacology*. **17**, p. 147-153
70. Sanchez, C. P., Mayer, S., Nurhasanah, A., Stein, W. D. and Lanzer, M. (2011), Genetic linkage analyses redefine the roles of PfCRT and PfMDR1 in drug accumulation and susceptibility in *Plasmodium falciparum*. *Molecular Microbiology*. **82**, p. 865-878
71. Hill, D. R., Baird, J. K., Parise, M. E., Lewis, L. S., Ryan, E. T. and Magill, A. J. (2006), Primaquine: report from CDC expert meeting on malaria chemoprophylaxis I. *The American journal of tropical medicine and hygiene*. **75**, p. 402-415
72. Vale, N., Moreira, R. and Gomes, P. (2009), Primaquine revisited six decades after its discovery. *European Journal of Medicinal Chemistry*. **44**, p. 937-953
73. Shekalaghe, S., Drakeley, C., Gosling, R., Ndaro, A., van Meegeren, M., Enevold, A., Alifrangis, M., Mosha, F., Sauerwein, R. and Bousema, T. (2007), Primaquine Clears Submicroscopic *Plasmodium falciparum* Gametocytes that Persist after Treatment with Sulphadoxine-Pyrimethamine and Artesunate. *PLoS ONE*. **2**, p. e1023
74. Gosling, R. D., Okell, L., Mosha, J. and Chandramohan, D. (2011), The role of antimalarial treatment in the elimination of malaria. *Clinical Microbiology and Infection*, p.
75. White, N. J. Primaquine to prevent transmission of falciparum malaria. *The Lancet Infectious Diseases*, p.
76. White, N. (2008), The role of anti-malarial drugs in eliminating malaria. *Malaria Journal*. **7**, p. S8
77. Hyde, J. E. (2005), Drug-resistant malaria. *Trends in Parasitology*. **21**, p. 494-498
78. Olliaro, P. (2001), Mode of action and mechanisms of resistance for antimalarial drugs. *Pharmacology & Therapeutics*. **89**, p. 207-219
79. Sibley, C. H., Hyde, J. E., Sims, P. F. G., Plowe, C. V., Kublin, J. G., Mberu, E. K., Cowman, A. F., Winstanley, P. A., Watkins, W. M. and Nzila, A. M. (2001), Pyrimethamine-sulfadoxine resistance in *Plasmodium falciparum*: what next? *Trends in Parasitology*. **17**, p. 570-571
80. Wongsrichanalai, C., Pickard, A. L., Wernsdorfer, W. H. and Meshnick, S. R. (2002), Epidemiology of drug-resistant malaria. *Infectious Diseases*. **2**, p. 209-218
81. Yuthavong, Y., Tarnchompoo, B., Vilaivan, T., Chitnumsub, P., Kamchonwongpaisan, S., Charman, S. A., McLennan, D. N., White, K. L., Vivas, L., Bongard, E., Thongphanchang, C., Taweechai, S., Vanichtanankul, J., Rattanajak, R., Arwon, U., Fantauzzi, P., Yuvaniyama, J., Charman, W. N. and Matthews, D. (2012), Malarial dihydrofolate reductase as a paradigm for drug development against a resistance-compromised target. *Proceedings of the National Academy of Sciences*. **109**, p. 16823-16828
82. Wurtz, N., Pascual, A., Marin-Jauffre, A., Bouchiba, H., Benoit, N., Desbordes, M., Martelloni, M., de Santi, V., Richa, G., Taudon, N., Pradines, B. and Briolant, S. (2012), Early treatment failure during treatment of *Plasmodium falciparum* malaria with atovaquone-proguanil in the Republic of Ivory Coast. *Malaria Journal*. **11**, p. 146

83. Nosten, F., McGready, R., d'Alessandro, U., Bonell, A., Verhoeff, F., Menendez, C., Mutabingwa, T. and Brabin, B. (2006), Antimalarial drugs in pregnancy: a review. *Current drug safety*. **1**, p. 1-15
84. Winstanley, P. and Ward, S. (2006) Malaria Chemotherapy. In *Advances in Parasitology* (David, H. M., ed.). pp. 47-76, Academic Press
85. Tinto, H., Guekoun, L., Zongo, I., Guiguemdé, R. T., D'Alessandro, U. and Ouédraogo, J. B. (2008), Chloroquine-resistance molecular markers (PfcrT T76 and Pfmdr-1 Y86) and amodiaquine resistance in Burkina Faso. *Tropical Medicine & International Health*. **13**, p. 238-240
86. Vangapandu, S., Jain, M., Kaur, K., Patil, P., Patel, S. R. and Jain, R. (2007), Recent advances in antimalarial drug development. *Medicinal Research Reviews*. **27**, p. 65-107
87. Ding, X. C., Beck, H. P. and Raso, G. (2010), Plasmodium sensitivity to artemisinins: magic bullets hit elusive targets. *Trends in Parasitology*, p.
88. Haynes, R. K. and Krishna, S. (2004), Artemisinins: activities and actions. *Microbes and Infection*. **6**, p. 1339-1346
89. Briolant, S., Wurtz, N., Zettor, A., Rogier, C. and Pradines, B. (2010), Susceptibility of *Plasmodium falciparum* isolates to doxycycline is associated with pftetQ sequence polymorphisms and pftetQ and pfmdt copy numbers. *Journal of Infectious Diseases*. **201**, p. 153-159
90. Price, R. N., Nosten, F., Luxemburger, C., ter Kuile, F. O., Paiphun, L., Chongsuphajaisiddhi, T. and White, N. J. (1996), Effects of artemisinin derivatives on malaria transmissibility. *The Lancet*. **347**, p. 1654-1658
91. White, N. J. (1997), Assessment of the pharmacodynamic properties of antimalarial drugs *in vivo*. *Antimicrobial Agents and Chemotherapy*. **41**, p. 1413-1422
92. Bharati, A., Kar, M. and Sabat, S. C. (2012), Artemisinin Inhibits Chloroplast Electron Transport Activity: Mode of Action. *PLoS ONE*. **7**, p. e38942
93. Cui, L., Wang, Z., Jiang, H., Parker, D., Wang, H. and Su, X. Z. (2012), Lack of Association of the S769N Mutation in *Plasmodium falciparum* SERCA (PfATP6) with Resistance to Artemisinins. *Antimicrobial Agents and Chemotherapy*. **56**, p. 2546-2552
94. Dondorp, A. M., Yeung, S., White, L., Nguon, C., Day, N. P. J., Socheat, D. and von Seidlein, L. (2010), Artemisinin resistance: current status and scenarios for containment. *Nat Rev Micro*. **8**, p. 272-280
95. Bassat, Q., Mulenga, M., Tinto, H., Piola, P., Borrmann, S., Menéndez, C., Nambozi, M., Valéa, I., Nabasumba, C., Sasi, P., Bacchieri, A., Corsi, M., Ubben, D., Talisuna, A. and D'Alessandro, U. (2009), Dihydroartemisinin-Piperaquine and Artemether-Lumefantrine for Treating Uncomplicated Malaria in African Children: A Randomised, Non-Inferiority Trial. *PLoS ONE*. **4**, p. e7871
96. Hughes, J. P., Rees, S., Kalindjian, S. B. and Philpott, K. L. (2011), Principles of early drug discovery. *British Journal of Pharmacology*. **162**, p. 1239-1249
97. Frearson, J. A., Wyatt, P. G., Gilbert, I. H. and Fairlamb, A. H. (2007), Target assessment for antiparasitic drug discovery. *Trends in Parasitology*. **23**, p. 589-595
98. Sun, H. (2008), Pharmacophore-Based Virtual Screening. *Current Medicinal Chemistry*. **15**, p. 1018-1024
99. Guiguemde, W. A., Shelat, A. A., Garcia-Bustos, J. F., Diagana, T. T., Gamo, F. J. and Guy, R. K. (2012), Global Phenotypic Screening for Antimalarials. *Chemistry & Biology*. **19**, p. 116-129
100. Smith, C. (2003), Drug target validation: Hitting the target. *Nature*. **422**, p. 341-347
101. Djebali, S., Davis, C. A., Merkel, A., *et al.* (2012), Landscape of transcription in human cells. *Nature*. **489**, p. 101-108
102. Dharia, N. V., Chatterjee, A. and Winzeler, E. A. (2010), Genomics and systems biology in malaria drug discovery. *Current opinion in investigational drugs (London, England: 2000)*. **11**, p. 131

103. Garrido-Franco, M., Laber, B., Huber, R. and Clausen, T. (2001), Structural basis for the function of pyridoxine 5'-phosphate synthase. *Structure*. **9**, p. 245-253
104. Gengenbacher, M., Fitzpatrick, T. B., Raschle, T., Flicker, K., Sinning, I., Müller, S., Macheroux, P., Tews, I. and Kappes, B. (2006), Vitamin B6 biosynthesis by the malaria parasite *Plasmodium falciparum*. *Journal of Biological Chemistry*. **281**, p. 3633-3641
105. Müller, I. B., Wu, F., Bergmann, B., Knöckel, J., Gehring, H., Walter, R. D. and Wrenger, C. (2009), Poisoning pyridoxal 5-phosphate dependent enzymes: a new strategy to target the malaria parasite *Plasmodium falciparum*. *PLoS ONE*. **4**, p. 1-9
106. Fitzpatrick, T. B., Amrhein, N., Kappes, B., Macheroux, P., Tews, I. and Raschle, T. (2007), Two independent routes of *de novo* vitamin B₆ biosynthesis: not that different after all. *Biochemical Journal*. **407**, p. 1-13
107. Mooney, S., Leuendorf, J., Hendrickson, C. and Hellman, H. (2009), Vitamin B6: A long known compound of surprising complexity. *Molecules*. **14**, p. 329-351
108. Müller, I. B., Hyde, J. E. and Wrenger, C. (2010), Vitamin B metabolism in *Plasmodium falciparum* as a source of drug targets. *Trends in Parasitology*. **26**, p. 35-43
109. Toney, M. D. (2005), Reaction specificity in pyridoxal phosphate enzymes. *Archives of Biochemistry and Biophysics*. **433**, p. 279-287
110. Garrido-Franco, M., Laber, B., Huber, R. and Clausen, T. (2002), Enzyme-ligand complexes of pyridoxine 5'-phosphate synthase: Implications for substrate binding and catalysis. *Journal of Molecular Biology*. **321**, p. 601-612
111. Midttun, Ø., Hustad, S., Solheim, E., Schneede, J. and Ueland, P. M. (2005), Multianalyte quantification of vitamin B₆ and B₂ species in the nanomolar range in human plasma by liquid chromatography - tandem mass spectrometry. *Clinical Chemistry*. **51**, p. 1206-1216
112. Drewke, C. and Leistner, E. (2001), Biosynthesis of vitamin B₆ and structurally related derivatives. *Vitamins and Hormones*. **61**, p. 121-155
113. Hoffmann-Ostenhof, O., Cohn, W. E., Braunstein, A. E. and Karlson, P. (1970), IUPAC-IUB Commission on Biochemical Nomenclature - Nomenclature for vitamins B6 and related compounds. Tentative rules. *Biochemistry*. **9**, p. 4019-4021
114. IUPAC-IUB (1973), IUPAC-IUB Commission on Biochemical Nomenclature - Definitive nomenclature for vitamins B-6 and related compounds. *Pure and Applied Chemistry*. **33**, p. 445-452
115. Komatsu, S., Yanaka, N., Matsubara, K. and Kato, N. (2003), Antitumor effect of vitamin B₆ and its mechanisms. *Biochimica et Biophysica Acta*. **1647**, p. 127-130
116. Ehrenshaft, M., Jenks, A. E., Chung, K. R. and Daub, M. E. (1998), *SOR1*, a gene required for photosensitizer and singlet oxygen resistance in *Cercospora* fungi, is highly conserved in divergent organisms. *Molecular Cell*. **1**, p. 603-609
117. Ehrenshaft, M., Bilski, P., Li, M. Y., Chignell, C. F. and Daub, M. E. (1999), A highly conserved sequence is a novel gene involved in *de novo* vitamin B6 biosynthesis. *Proceedings of the National Academy of Sciences of the United States of America*. **96**, p. 9374-9378
118. Ehrenshaft, M. and Daub, M. E. (2001), Isolation of PDX2, a second novel gene in the pyridoxine biosynthesis pathway of eukaryotes, archaeobacteria, and a subset of eubacteria. *Journal of Bacteriology*. **183**, p. 3383-3390
119. Zhu, J., Burgner, J. W., Harms, E., Belitsky, B. R. and Smith, J. L. (2005), A new arrangement of (β/α)₈ Barrels in the synthase subunit of PLP synthase. *Journal of Biological Chemistry*. **280**, p. 27914-27923
120. Osmani, A. H., May, G. S. and Osmani, S. A. (1999), The extremely conserved *pyroA* gene of *Aspergillus nidulans* is required for pyridoxine synthesis and is required indirectly for resistance to photosensitizers. *Journal of Biological Chemistry*. **274**, p. 23565-23569
121. Mukherjee, T., Hanes, J., Tews, I., Ealick, S. E. and Begley, T. P. (2011), Pyridoxal phosphate: Biosynthesis and catabolism. *Biochimica et Biophysica Acta (BBA) - Proteins and Proteomics*. **1814**, p. 1585-1596

122. di Salvo, M. L., Contestabile, R. and Safo, M. K. (2011), Vitamin B6 salvage enzymes: Mechanism, structure and regulation. *Biochimica et Biophysica Acta (BBA) - Proteins and Proteomics*. **1814**, p. 1597-1608
123. Fonda, M. L. (1992), Purification and characterization of vitamin B₆-phosphate phosphatase from human erythrocytes. *Journal of Biological Chemistry*. **267**, p. 15978-15983
124. McCormick, D. B. and Chen, H. (1999), Update on interconversions of vitamin B-6 with its coenzyme. *The Journal of Nutrition*. **129**, p. 325-327
125. Anderson, B. B., Fulford-Jones, C. E., Child, J. A., Beard, M. E. J. and Bateman, C. J. T. (1971), Conversion of vitamin B₆ compounds to active forms in the red blood cell. *Journal of Clinical Investigation*. **50**, p. 1901-1909
126. Anderson, B. B., Perry, G. M., Clements, J. E. and Greany, M. (1989), Rapid uptake and clearance of pyridoxine by red blood cells *in vivo*. *The American Journal of Clinical Nutrition*. **50**, p. 1059-1063
127. Mehansho, H. and Henderson, L. H. (1980), Transport and accumulation of pyridoxine and pyridoxal by erythrocytes. *Journal of Biological Chemistry*. **255**, p. 11901-11907
128. Gao, G. and Fonda, M. L. (1994), Kinetic analysis and chemical modification of vitamin B₆ phosphatase from human erythrocytes. *Journal of Biological Chemistry*. **269**, p. 7163-7168
129. Fonda, M. L. and Harker, M. S. (1982), Metabolism of pyridoxine and protein binding of the metabolites in human erythrocytes. *The American Journal of Clinical Nutrition*. **35**, p. 1391-1399
130. Benesch, R. E., Benesch, R., Renthall, R. D. and Maeda, N. (1972), Affinity labeling of the polyphosphate binding site of hemoglobin. *Biochemistry*. **11**, p. 3576-3582
131. Talwar, D., Quasim, T., McMillan, D. C., Kinsella, J., Williamson, C. and O'Reilly, D. S. J. (2003), Optimisation and validation of a sensitive high-performance liquid chromatography assay for routine measurement of pyridoxal 5-phosphate in human plasma and red cells using pre-column semicarbazide derivatisation. *Journal of Chromatography B*. **792**, p. 333-343
132. Wrenger, C., Eschbach, M., Müller, I. B., Warnecke, D. and Walter, R. D. (2005), Analysis of the vitamin B6 biosynthesis pathway in the human malaria parasite *Plasmodium falciparum*. *Journal of Biological Chemistry*. **280**, p. 5242-5248
133. Müller, I. B., Knöckel, J., Groves, M. R., Jordanova, R., Ealick, S. E., Walter, R. D. and Wrenger, C. (2008), The assembly of the plasmodial PLP synthase complex follows a defined course. *PLoS ONE*. **3**, p. 1-9
134. Müller, I. B., Knöckel, J., Eschbach, M., Bergmann, B., Walter, R. D. and Wrenger, C. (2010), Secretion of an acid phosphatase provides a possible mechanism to acquire host nutrients by *Plasmodium falciparum*. *Cellular Microbiology*. **12**, p. 677-691
135. Müller, S. and Kappes, B. (2007), Vitamin and cofactor biosynthesis pathways in *Plasmodium* and other apicomplexan parasites. *Trends in Parasitology*. **23**, p. 112-121
136. Knöckel, J., Bergmann, B., Müller, I. B., Rathaur, S., Walter, R. D. and Wrenger, C. (2008), Filling the gap of intracellular dephosphorylation in the *Plasmodium falciparum* vitamin B1 biosynthesis. *Molecular & Biochemical Parasitology*. **157**, p. 241-243
137. Lasonder, E., Ishihama, Y., Andersen, J. S., Vermunt, A. M. W., Pain, A., Sauerwein, R. W., Eling, W. M. C., Hall, N., Waters, A. P., Stunnenberg, H. G. and Mann, M. (2002), Analysis of the *Plasmodium falciparum* proteome by high-accuracy mass spectrometry. *Nature*. **419**, p. 537-542
138. Denslow, S. A., Walls, A. A. and Daub, M. E. (2005), Regulation of biosynthetic genes and antioxidant properties of vitamin B₆ vitamers during plants defense responses. *Physiological and Molecular Plant Pathology*. **66**, p. 244-255
139. Matxain, J. M., Padro, D., Ristilä, M., Strid, Å. and Eriksson, L. A. (2009), Evidence of high •OH radical quenching efficiency by vitamin B₆. *The Journal of Physical Chemistry B*. **113**, p. 9629-9632

140. Butzloff, S., Groves, M. R., Wrenger, C. and Müller, I. B. (2012), Cytometric quantification of singlet oxygen in the human malaria parasite *Plasmodium falciparum*. *Cytometry Part A*. **81**, p. 698-703
141. Knöckel, J., Müller, I. B., Butzloff, S., Bergmann, B., Walter, R. D. and Wrenger, C. (2012), The antioxidative effect of de novo generated vitamin B6 in *Plasmodium falciparum* validated by protein interference. *Biochemical Journal*. **443**, p. 397-405
142. Milord, F., Pépin, J., Ethier, L., Loko, L. and Mpia, B. (1992), Efficacy and toxicity of eflornithine for treatment of *Trypanosoma brucei* gambiense sleeping sickness. *The Lancet*. **340**, p. 652-655
143. Wang, Q.-P., Jammoul, F., Duboc, A., Gong, J., Simonutti, M., Dubus, E., Craft, C. M., Ye, W., Sahel, J. A. and Picaud, S. (2008), Treatment of epilepsy: the GABA-transaminase inhibitor, vigabatrin, induces neuronal plasticity in the mouse retina. *European Journal of Neuroscience*. **27**, p. 2177-2187
144. Amadasi, A., Bertoldi, M., Contestabile, R., Bettati, S., Cellini, B., Luigi di Salvo, M., Borri-Voltattorni, C., Bossa, F. and Mozzarelli, A. Pyridoxal 5-Phosphate Enzymes as Targets for Therapeutic Agents. *Current Medicinal Chemistry*. **14**, p. 1291-1324
145. Kappes, B., Tews, I., Binter, A. and Macheroux, P. (2011), PLP-dependent enzymes as potential drug targets for protozoan diseases. *Biochimica et Biophysica Acta (BBA) - Proteins and Proteomics*. **1814**, p. 1567-1576
146. Plouffe, D., Brinker, A., McNamara, C., Henson, K., Kato, N., Kuhen, K., Nagle, A., Adrián, F., Matzen, J. T. and Anderson, P. (2008), In silico activity profiling reveals the mechanism of action of antimalarials discovered in a high-throughput screen. *Proceedings of the National Academy of Sciences*. **105**, p. 9059
147. Zartler, E. R. and Shapiro, M. J. (2005), Fragonomics: fragment-based drug discovery. *Current Opinion in Chemical Biology*. **9**, p. 366-370
148. Leach, A. R. and Hann, M. M. (2011), Molecular complexity and fragment-based drug discovery: ten years on. *Current Opinion in Chemical Biology*. **15**, p. 489-496
149. Swinney, D. C. and Anthony, J. (2011), How were new medicines discovered? *Nature Reviews Drug Discovery*. **10**, p. 507-519
150. Lyne, P. D. (2002), Structure-based virtual screening: an overview. *Drug Discovery Today*. **7**, p. 1047-1055
151. Nicola, G., Smith, C. A., Lucumi, E., Kuo, M. R., Karagoyozov, L., Fidock, D. A., Sacchettini, J. C. and Abagyan, R. (2007), Discovery of novel inhibitors targeting enoyl-acyl carrier protein reductase in *Plasmodium falciparum* by structure-based virtual screening. *Biochemical and Biophysical Research Communications*. **358**, p. 686-691
152. Haque, T. S., Skillman, A. G., Lee, C. E., Habashita, H., Gluzman, I. Y., Ewing, T. J. A., Goldberg, D. E., Kuntz, I. D. and Ellman, J. A. (1999), Potent, Low-Molecular-Weight Non-Peptide Inhibitors of Malarial Aspartyl Protease Plasmeprin II. *Journal of Medicinal Chemistry*. **42**, p. 1428-1440
153. Kick, E. K., Roe, D. C., Skillman, A. G., Liu, G., Ewing, T. J., Sun, Y., Kuntz, I. D. and Ellman, J. A. (1997), Structure-based design and combinatorial chemistry yield low nanomolar inhibitors of cathepsin D. *Chem Biol*. **4**, p. 297-307
154. Desai, P. V., Patny, A., Gut, J., Rosenthal, P. J., Tekwani, B., Srivastava, A. and Avery, M. (2006), Identification of Novel Parasitic Cysteine Protease Inhibitors by Use of Virtual Screening. 2. The Available Chemical Directory. *Journal of Medicinal Chemistry*. **49**, p. 1576-1584
155. Yang, S.-Y. (2010), Pharmacophore modeling and applications in drug discovery: challenges and recent advances. *Drug Discovery Today*. **15**, p. 444-450
156. Strohmeier, M., Raschle, T., Mazurkiewicz, J., Rippe, K., Sinning, I., Fitzpatrick, T. B. and Tews, I. (2006), Structure of a bacterial pyridoxal 5'-phosphate synthase complex. *Proceedings of the National Academy of Sciences of the United States of America*. **103**, p. 19284-19289

157. Zein, F., Zhang, Y., Kang, Y. N., Burns, K., Begley, T. P. and Ealick, S. E. (2006), Structural insights into the mechanism of the PLP synthase holoenzyme from *Thermotoga maritima*. *Biochemistry*. **45**, p. 14609-14620
158. Knöckel, J., Jordanova, R., Müller, I. B., Wrenger, C. and Groves, M. R. (2009), Mobility of the conserved glycine 155 is required for formation of the active plasmodial dodecamer. *Biochimica et Biophysica Acta*. **1790**, p. 347-350
159. Flicker, K., Neuwirth, M., Strohmeier, M., Kappes, B., Tews, I. and Macheroux, P. (2007), Structural and thermodynamic insights into the assembly of the heteromeric pyridoxal phosphate synthase from *Plasmodium falciparum*. *Journal of Molecular Biology*. **374**, p. 732-748
160. Hanes, J. W., Keresztes, I. and Begley, T. P. (2008), ¹³C NMR snapshots of the complex reaction coordinate of pyridoxal phosphate synthase. *Nature Chemical Biology*. **4**, p. 425-430
161. Hanes, J. W., Burns, K. E., Hilmey, D. G., Chatterjee, A., Dorrestein, P. C. and Begley, T. P. (2008), Mechanistic studies on pyridoxal phosphate synthase: the reaction pathway leading to a chromophoric intermediate. *Journal of the American Chemical Society*. **130**, p. 3043-3052
162. Raschle, T., Arigoni, D., Brunisholz, R., Rechsteiner, H., Amrhein, N. and Fitzpatrick, T. B. (2007), Reaction mechanism of pyridoxal 5'-phosphate synthase. Detection of an enzyme-bound chromophoric intermediate. *Journal of Biological Chemistry*. **282**, p. 6098-6105
163. Zhang, X., Teng, Y., Liu, J., He, Y., Zhou, K., Chen, Y. and Zhou, C. (2010), Structural insights into the catalytic mechanism of the yeast pyridoxal 5-phosphate synthase Snz1. *Biochemical Journal*. **432**, p. 445-450
164. Guédez, G., Hipp, K., Windeisen, V., Derrer, B., Gengenbacher, M., Böttcher, B., Sinning, I., Kappes, B. and Tews, I. (2012), Assembly of the eukaryotic PLP-synthase complex from *Plasmodium* and activation of the Pdx1 enzyme. *Structure*. **20**, p. 172-184
165. Hillisch, A., Pineda, L. F. and Hilgenfeld, R. (2004), Utility of homology models in the drug discovery process. *Drug Discovery Today*. **9**, p. 659-669
166. Šali, A. and Blundell, T. L. (1993), Comparative Protein Modelling by Satisfaction of Spatial Restraints. *Journal of Molecular Biology*. **234**, p. 779-815
167. Prlić, A., Bliven, S., Rose, P. W., Bluhm, W. F., Bizon, C., Godzik, A. and Bourne, P. E. (2010), Pre-calculated protein structure alignments at the RCSB PDB website. *Bioinformatics*. **26**, p. 2983-2985
168. Shindyalov, I. N. and Bourne, P. E. (1998), Protein structure alignment by incremental combinatorial extension (CE) of the optimal path. *Protein Engineering*. **11**, p. 739-747
169. Laskowski, R. A. (2009), PDBsum new things. *Nucleic Acids Research*. **37**, p. D355-D359
170. Laskowski, R. A. (2001), PDBsum: summaries and analyses of PDB structures. *Nucleic Acids Research*. **29**, p. 221-222
171. Laskowski, R. A., MacArthur, M. W., Moss, D. S. and Thornton, J. M. (1993), PROCHECK: a program to check the stereochemical quality of protein structures. *Journal of Applied Crystallography*. **26**, p. 283-291
172. Brooks, B. R., Brucoleri, R. E., Olafson, B. D., States, D. J., Swaminathan, S. and Karplus, M. (1983), CHARMM: A program for macromolecular energy minimization and dynamics calculations. *Journal of Computational Chemistry*. **4**, p. 187-217
173. Cheng, T., Li, Q., Zhou, Z., Wang, Y. and Bryant, S. (2012), Structure-Based Virtual Screening for Drug Discovery: a Problem-Centric Review. *The AAPS Journal*. **14**, p. 133-141
174. Irwin, J. J. and Shoichet, B. K. (2005), ZINC-a free database of commercially available compounds for virtual screening. *Journal of Chemical Information and Modeling*. **45**, p. 177-182
175. Kabsch, W. (1976), A solution for the best rotation to relate two sets of vectors. *Acta Crystallographica Section A*. **32**, p. 922-923

176. Venkatachalam, C., Jiang, X., Oldfield, T. and Waldman, M. (2003), LigandFit: a novel method for the shape-directed rapid docking of ligands to protein active sites. *Journal of Molecular Graphics and Modelling*. **21**, p. 289-307
177. Mayo, S. L., Olafson, B. D. and Goddard, W. A. (1990), DREIDING: A generic force field for molecular simulations. *Journal of Physical Chemistry*. **94**, p. 8897-8909
178. Krammer, A., Kirchhoff, P. D., Jiang, X., Venkatachalam, C. and Waldman, M. (2005), LigScore: a novel scoring function for predicting binding affinities. *Journal of Molecular Graphics and Modelling*. **23**, p. 395-407
179. Shen, M. and Sali, A. (2006), Statistical potential for assessment and prediction of protein structures. *Protein Science*. **15**, p. 2507-2524
180. Ho, B. and Brasseur, R. (2005), The Ramachandran plots of glycine and pre-proline. *BMC Structural Biology*. **5**, p. 14
181. MacArthur, M. W. and Thornton, J. M. (1991), Influence of proline residues on protein conformation. *Journal of Molecular Biology*. **218**, p. 397-412
182. Derrer, B., Windeisen, V., Guedez Rodriguez, G., Seidler, J., Gengenbacher, M., Lehmann, W. D., Rippe, K., Sinning, I., Tews, I. and Kappes, B. (2010), Defining the structural requirements of ribose 5-phosphate-binding and intersubunit cross-talk of the malarial pyridoxal 5-phosphate synthase. *FEBS Letters*. **584**, p. 4169-4174
183. Pal, D. and Chakrabarti, P. (2002), On residues in the disallowed region of the Ramachandran map. *Biopolymers*. **63**, p. 195-206
184. Lipinski, C. A., Lombardo, F., Dominy, B. W. and Feeney, P. J. (2001), Experimental and computational approaches to estimate solubility and permeability in drug discovery and development settings. *Advanced Drug Delivery Reviews*. **46**, p. 3-26
185. Lipinski, C. A. (2004), Lead- and drug-like compounds: the rule-of-five revolution. *Drug Discovery Today: Technologies*. **1**, p. 337-341
186. Burger, P. B. (2009) Development of a dynamic receptor-based pharmacophore model of *Plasmodium falciparum* spermidine synthase for selective inhibitor identification. PhD thesis, University of Pretoria, Pretoria, <http://upetd.up.ac.za/thesis/available/etd-05252009-220942/>, viewed 2013-01-21
187. Knöckel, J., Müller, I. B., Bergmann, B., Walter, R. D. and Wrenger, C. (2007), The apicomplexan parasite *Toxoplasma gondii* generates pyridoxal phosphate *de novo*. *Molecular & Biochemical Parasitology*. **152**, p. 108-111
188. Galperin, M. Y. and Koonin, E. V. (1997), Sequence analysis of an exceptionally conserved operon suggests enzymes for a new link between histidine and purine biosynthesis. *Molecular Microbiology*. **24**, p. 443-445
189. Wolber, G., Seidel, T., Bendix, F. and Langer, T. (2008), Molecule-pharmacophore superpositioning and pattern matching in computational drug design. *Drug Discovery Today*. **13**, p. 23-29
190. Warren, G. L., Andrews, C. W., Capelli, A.-M., Clarke, B., LaLonde, J., Lambert, M. H., Lindvall, M., Nevins, N., Semus, S. F., Senger, S., Tedesco, G., Wall, I. D., Woolven, J. M., Peishoff, C. E. and Head, M. S. (2005), A Critical Assessment of Docking Programs and Scoring Functions. *Journal of Medicinal Chemistry*. **49**, p. 5912-5931
191. Davis, A. M., Keeling, D. J., Steele, J., Tomkinson, N. P. and Tinker, A. C. Components of Successful Lead Generation. *Current Topics in Medicinal Chemistry*. **5**, p. 421-439
192. Musicki, B. and Widlanski, T. S. (1990), Synthesis of carbohydrate sulfonates and sulfonate esters. *The Journal of Organic Chemistry*. **55**, p. 4231-4233
193. Böhm, H.-J., Flohr, A. and Stahl, M. (2004), Scaffold hopping. *Drug Discovery Today: Technologies*. **1**, p. 217-224
194. Burns, K. E., Xiang, Y., Kinsland, C. L., McLafferty, F. W. and Begley, T. P. (2005), Reconstitution and biochemical characterization of a new pyridoxal-5'-phosphate biosynthetic pathway. *Journal of the American Chemical Society*. **127**, p. 3682-3683

195. Tazuya, K., Adachi, Y., Masuda, K., Yamada and Kumaoka, H. (1995), Origin of the nitrogen atom of pyridoxine in *Saccharomyces cerevisiae*. *Biochemica et Biophysica Acta*. **1244**, p. 113-116
196. Hanes, J. W., Keresztes, I. and Begley, T. P. (2008), Trapping of a chromophoric intermediate in the Pdx1-catalyzed biosynthesis of pyridoxal 5'-phosphate. *Angewandte Chemie (International ed. in English)*. **47**, p. 2101-2105
197. Bradford, M. M. (1976), A rapid and sensitive method for the quantitation of microgram quantities of protein utilizing the principle of protein-dye binding. *Analytical Biochemistry*. **72**, p. 248-254
198. Laemmli, U. K. (1970), Cleavage of structural proteins during the assembly of the head of bacteriophage T4. *Nature*. **117**, p. 680-685
199. Sharma, S. and Dakshinamurti, K. (1992), Determination of vitamin B6 vitamers and pyridoxic acid in biological samples. *Journal of Chromatography: Biomedical Applications*. **578**, p. 45-51
200. Sambrook, J., Fritsch, E. and Maniatis, T. (1989) *Molecular Cloning: A Laboratory Manual*, pp. A1–A4. ed.)^eds.), Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY
201. Trager, W. and Jensen, J. B. (1976), Human malaria parasites in continuous culture. *Science*. **193**, p. 673-675
202. Lambros, C. and Vanderberg, J. P. (1979), Synchronization of *Plasmodium falciparum* erythrocytic stages in culture. *The Journal of Parasitology*. **3**, p. 418-420
203. Das Gupta, R., Krause-Ihle, T., Bergmann, B., Müller, I. B., Khomutov, A. R., Müller, S., Walter, R. D. and Lüersen, K. (2005), 3-Aminooxy-1-aminopropane and derivatives have an antiproliferative effect on cultured *Plasmodium falciparum* by decreasing intracellular polyamine concentrations. *Antimicrobial Agents and Chemotherapy*. **49**, p. 2857-2864
204. Liu, J., Gluzman, I. Y., Drew, M. E. and Goldberg, D. E. (2005), The role of *Plasmodium falciparum* food vacuole plasmepsins. *Journal of Biological Chemistry*. **280**, p. 1432-1437
205. Brooks, H. B., Geeganage, S., Kahl, S. D., Montrose, C., Sittampalam, S., Smith, M. C. and Weidner, J. R. (2004) Basics of Enzymatic Assays for HTS. In *Assay Guidance Manual* (Sittampalam, G. S., Gal-Edd, N., Arkin, M., Auld, D., Austin, C., Bejcek, B., Glicksman, M., Inglese, J., Lemmon, V., Li, Z., McGee, J., McManus, O., Minor, L., Napper, A., Riss, T., Trask, O. J. and Weidner, J., eds.), Eli Lilly & Company and the National Center for Advancing Translational Sciences., Bethesda MD
206. Burgos, E. and Salmon, L. (2004), Synthesis and evaluation of new 4-phospho-D-erythronic acid derivatives as competitive inhibitors of spinach ribose-5-phosphate isomerase. *Tetrahedron Letters*. **45**, p. 753-756
207. Dahl, E. L., Shock, J. L., Shenai, B. R., Gut, J., DeRisi, J. L. and Rosenthal, P. J. (2006), Tetracyclines Specifically Target the Apicoplast of the Malaria Parasite *Plasmodium falciparum*. *Antimicrobial Agents and Chemotherapy*. **50**, p. 3124-3131
208. Blackmore, P. F., Williams, J. F. and MacLeod, J. K. (1976), Dimerization of erythrose 4-phosphate. *FEBS Letters*. **64**, p. 222-226
209. Parker, E. J., Bulloch, E. M. M., Jameson, G. B. and Abell, C. (2001), Substrate deactivation of phenylalanine-sensitive 3-deoxy-D-arabino-heptulosonate 7-Phosphate synthase by erythrose 4-phosphate. *Biochemistry*. **40**, p. 14821-14828
210. Backhausen, J. E., Jöstingmeyer, P. and Scheibe, R. (1997), Competitive inhibition of spinach leaf phosphoglucose isomerase isoenzymes by erythrose 4-phosphate. *Plant Science*. **130**, p. 121-131
211. Lolis, E. and Petsko, G. A. (1990), Crystallographic analysis of the complex between triosephosphate isomerase and 2-phosphoglycolate at 2.5-Å resolution: implications for catalysis. *Biochemistry*. **29**, p. 6619-6625
212. Jeffery, C. J., Bahnson, B. J., Chien, W., Ringe, D. and Petsko, G. A. (2000), Crystal structure of rabbit phosphoglucose isomerase, a glycolytic enzyme that moonlights as

- neuroleukin, autocrine motility factor, and differentiation mediator. *Biochemistry*. **39**, p. 955-964
213. Read, J., Pearce, J., Li, X., Muirhead, H., Chirgwin, J. and Davies, C. (2001), The crystal structure of human phosphoglucose isomerase at 1.6 Å resolution: implications for catalytic mechanism, cytokine activity and haemolytic anaemia. *Journal of Molecular Biology*. **309**, p. 447-463
214. Roberts, C. W., Roberts, F., Lyons, R. E., Kirisits, M. J., Mui, E. J., Finnerty, J., Johnson, J. J., Ferguson, D. J. P., Coggins, J. R., Krell, T., Coombs, G. H., Milhous, W. K., Kyle, D. E., Tzipori, S., Barnwell, J., Dame, J. B., Jane, C. and McLeod, R. (2002), The Shikimate Pathway and Its Branches in Apicomplexan Parasites. *Journal of Infectious Diseases*. **185**, p. S25-S36
215. Bozdech, Z. and Ginsburg, H. (2005), Data mining of the transcriptome of *Plasmodium falciparum*: the pentose phosphate pathway and ancillary processes. *Malaria Journal*. **4**, p. 17
216. Joshi, S., Singh, A. R., Kumar, A., Misra, P. C., Siddiqi, M. I. and Saxena, J. K. (2008), Molecular cloning and characterization of *Plasmodium falciparum* transketolase. *Molecular & Biochemical Parasitology*. **160**, p. 32-41
217. Dieckmann, A. and Jung, A. (1986), Mechanisms of sulfadoxine resistance in *Plasmodium falciparum*. *Molecular & Biochemical Parasitology*. **19**, p. 143-147
218. Burgos, E. and Salmon, L. (2004), Synthesis and kinetic evaluation of 4-deoxy-4-phosphonomethyl-D-erythronate, the first hydrolytically stable and potent competitive inhibitor of ribose-5-phosphate isomerase. *Tetrahedron Letters*. **45**, p. 3465-3469
219. Raschle, T., Speziga, D., Kress, W., Moccand, C., Gehrig, P., Amrhein, N., Weber-Ban, E. and Fitzpatrick, T. B. (2009), Intersubunit cross-talk in pyridoxal 5'-phosphate synthase coordinated by the C terminus of the synthase subunit. *Journal of Biological Chemistry*. **284**, p. 7706-7718
220. Cassera, M. B., Hazleton, K. Z., Riegelhaupt, R. M., Merino, E. F., Luo, M., Akabas, M. H. and Schramm, V. L. (2008), Erythrocytic adenosine monophosphate as an alternative purine source in *Plasmodium falciparum*. *Journal of Biological Chemistry*. **283**, p. 32889-32899
221. Moccand, C., Kaufmann, M. and Fitzpatrick, T. B. (2011), It takes two to tango: defining an essential second active site in pyridoxal 5'-phosphate synthase. *PLoS ONE*. **6**, p. e16042
222. Birkholtz, L., van Brummelen, A. C., Clark, K., Niemand, J., Maréchal, E., Llinás, M. and Louw, A. I. (2008), Exploring functional genomics for drug target and therapeutics discovery in Plasmodia. *Acta Tropica*. **105**, p. 113-123
223. Bai, J. P. F. and Abernethy, D. R. (2013), Systems Pharmacology to Predict Drug Toxicity: Integration Across Levels of Biological Organization. *Annual Review of Pharmacology and Toxicology*. **53**, p. null
224. Baginsky, S., Hennig, L., Zimmermann, P. and Gruissem, W. (2010), Gene expression analysis, proteomics, and network discovery. *Plant Physiology*. **152**, p. 402-410
225. Bozdech, Z., Llinás, M., Pulliam, B. L., Wong, E. D., Zhu, J. and DeRisi, J. L. (2003), The transcriptome of the intraerythrocytic developmental cycle of *Plasmodium falciparum*. *PLoS Biology*. **1**, p. E5
226. Silvestrini, F., Bozdech, Z., Lanfrancotti, A., Giulio, E. D., Bultrini, E., Picci, L., deRisi, J. L., Pizzi, E. and Alano, P. (2005), Genome-wide identification of genes upregulated at the onset of gametocytogenesis in *Plasmodium falciparum*. *Molecular and Biochemical Parasitology*. **143**, p. 100-110
227. Young, J. A., Fivelman, Q. L., Blair, P. L., de la Vega, P., Le Roch, K. G., Zhou, Y., Carucci, D. J., Baker, D. A. and Winzeler, E. A. (2005), The *Plasmodium falciparum* sexual development transcriptome: A microarray analysis using ontology-based pattern identification. *Molecular and Biochemical Parasitology*. **143**, p. 67-79
228. Le Roch, K. G., Zhou, Y., Blair, P. L., Grainger, M., Moch, J. K., Haynes, J. D., De la Vega, P., Holder, A. A., Batalov, S., Carucci, D. J. and Winzeler, E. A. (2003), Discovery of Gene

- Function by Expression Profiling of the Malaria Parasite Life Cycle. *Science*. **301**, p. 1503-1508
229. Llinás, M., Bozdech, Z., Wong, E. D., Adai, A. T. and DeRisi, J. L. (2006), Comparative whole genome transcriptome analysis of three *Plasmodium falciparum* strains. *Nucleic Acids Research*. **34**, p. 1166-1173
230. Mackinnon, M. J., Li, J., Mok, S., Kortok, M. M., Marsh, K., Preiser, P. R. and Bozdech, Z. (2009), Comparative Transcriptional and Genomic Analysis of *Plasmodium falciparum* Field Isolates. *PLoS Pathog.* **5**, p. e1000644
231. Siau, A., Touré, F. S., Ouwe-Missi-Oukem-Boyer, O., Cicéron, L., Mahmoudi, N., Vaquero, C., Froissard, P., Bisvigou, U., Bisser, S., Coppée, J.-Y., Bischoff, E., David, P. H. and Mazier, D. (2007), Whole-Transcriptome Analysis of *Plasmodium falciparum* Field Isolates: Identification of New Pathogenicity Factors. *Journal of Infectious Diseases*. **196**, p. 1603-1612
232. Jiang, H., Patel, J. J., Yi, M., Mu, J., Ding, J., Stephens, R., Cooper, R. A., Ferdig, M. T. and Su, X.-z. (2008), Genome-wide compensatory changes accompany drug-selected mutations in the *Plasmodium falciparum* crt gene. *PLoS ONE*. **3**, p. e2484
233. Daily, J. P., Le Roch, K. G., Sarr, O., Ndiaye, D., Lukens, A., Zhou, Y., Ndir, O., Mboup, S., Sultan, A., Winzeler, E. A. and Wirth, D. F. (2005), *In Vivo* transcriptome of *Plasmodium falciparum* reveals overexpression of transcripts that encode surface proteins. *Journal of Infectious Diseases*. **191**, p. 1196-1203
234. Torrentino-Madamet, M., Almeras, L., Desplans, J., Priol, Y., Belghazi, M., Pophillat, M., Fourquet, P., Jammes, Y. and Parzy, D. (2011), Global response of *Plasmodium falciparum* to hyperoxia: a combined transcriptomic and proteomic approach. *Malaria Journal*. **10**, p. 4
235. Oakley, M. S. M., Kumar, S., Anantharaman, V., Zheng, H., Mahajan, B., Haynes, J. D., Moch, J. K., Fairhurst, R., McCutchan, T. F. and Aravind, L. (2007), Molecular factors and biochemical pathways induced by febrile temperature in intraerythrocytic *Plasmodium falciparum* parasites. *Infection and Immunity*. **75**, p. 2012
236. Kritsiriwuthinan, K., Chaotheing, S., Shaw, P., Wongsombat, C., Chavalitsheewinkoon-Petmitr, P. and Kamchonwongpaisan, S. (2011), Global gene expression profiling of *Plasmodium falciparum* in response to the anti-malarial drug pyronaridine. *Malaria Journal*. **10**, p. 242
237. Brunner, R., Aissaoui, H., Boss, C., Bozdech, Z., Brun, R., Corminboeuf, O., Delahaye, S., Fischli, C., Heidmann, B., Kaiser, M., Kamber, J., Meyer, S., Papastogiannidis, P., Siegrist, R., Voss, T., Welford, R., Wittlin, S. and Binkert, C. (2012), Identification of a New Chemical Class of Antimalarials. *Journal of Infectious Diseases*. **206**, p. 735-743
238. Cui, L., Wang, Z., Miao, J., Miao, M., Chandra, R., Jiang, H., Su, X.-z. and Cui, L. (2012), Mechanisms of *in vitro* resistance to dihydroartemisinin in *Plasmodium falciparum*. *Molecular Microbiology*. **86**, p. 111-128
239. Dharia, N., Sidhu, A., Cassera, M., Westenberger, S., Bopp, S., Eastman, R., Plouffe, D., Batalov, S., Park, D., Volkman, S., Wirth, D., Zhou, Y., Fidock, D. and Winzeler, E. (2009), Use of high-density tiling microarrays to identify mutations globally and elucidate mechanisms of drug resistance in *Plasmodium falciparum*. *Genome Biology*. **10**, p. R21
240. Gunasekera, A. M., Myrick, A., Roch, K. L., Winzeler, E. and Wirth, D. F. (2007), *Plasmodium falciparum*: Genome wide perturbations in transcript profiles among mixed stage cultures after chloroquine treatment. *Experimental Parasitology*. **117**, p. 87-92
241. Ganesan, K., Ponmee, N., Jiang, L., Fowble, J. W., White, J., Kamchonwongpaisan, S., Yuthavong, Y., Wilairat, P. and Rathod, P. K. (2008), A genetically hard-wired metabolic transcriptome in *Plasmodium falciparum* fails to mount protective responses to lethal antifolates. *PLoS Pathogens*. **4**, p. e1000214
242. Hu, G., Cabrera, A., Kono, M., Mok, S., Chaal, B. K., Haase, S., Engelberg, K., Cheemadan, S., Spielmann, T. and Preiser, P. R. (2009), Transcriptional profiling of growth perturbations of the human malaria parasite *Plasmodium falciparum*. *Nature Biotechnology*. **28**, p. 91-98

243. Smit, S. (2010) Functional consequences of the inhibition of Malaria S-adenosylmethionine decarboxylase as a key regulator of polyamine and methionine metabolism. PhD thesis, University of Pretoria, Pretoria, <http://upetd.up.ac.za/thesis/available/etd-06222011-081539/>, viewed 2012-10-21
244. Van Brummelen, A. C. (2008) Functional genomics analysis of the effects of co-inhibition of the malarial S-adenosylmethionine decarboxylase/ornithine decarboxylase. PhD thesis, University of Pretoria, Pretoria, <http://upetd.up.ac.za/thesis/available/etd-05302009-124548/>, viewed 2012-10-21
245. Chomczynski, P. and Sacchi, N. (1987), Single-step method of RNA isolation by acid guanidinium thiocyanate-phenol-chloroform extraction. *Analytical Biochemistry*. **162**, p. 156-159
246. Delibato, E., Gattuso, A., Minucci, A., Auricchio, B., De Medici, D., Toti, L., Castagnola, M., Capoluongo, E. and Gianfranceschi, M. V. (2009), PCR experion automated electrophoresis system to detect *Listeria monocytogenes* in foods. *Journal of Separation Science*. **32**, p. 3817-3821
247. Göhlmann, H. and Talloen, W. (2009) Gene expression studies using Affymetrix microarrays. Chapman & Hall/CRC
248. Smyth, G. (2005), Limma: linear models for microarray data. *Bioinformatics and computational biology solutions using R and bioconductor*, p. 397-420
249. Ritchie, M. E., Silver, J., Oshlack, A., Holmes, M., Diyagama, D., Holloway, A. and Smyth, G. K. (2007), A comparison of background correction methods for two-colour microarrays. *Bioinformatics*. **23**, p. 2700
250. Rainer, J., Sanchez-Cabo, F., Stocker, G., Sturn, A. and Trajanoski, Z. (2006), CARMAweb: comprehensive R-and bioconductor-based web service for microarray data analysis. *Nucleic Acids Research*. **34**, p. W498
251. Yang, M., Ruan, Q., Yang, J., Eckenrode, S., Wu, S., McIndoe, R. and She, J. (2001), A statistical method for flagging weak spots improves normalization and ratio estimates in microarrays. *Physiological Genomics*. **7**, p. 45
252. Smyth, G. K. and Speed, T. (2003), Normalization of cDNA microarray data. *Methods*. **31**, p. 265-273
253. Smyth, G. K., Michaud, J. and Scott, H. S. (2005), Use of within-array replicate spots for assessing differential expression in microarray experiments. *Bioinformatics*. **21**, p. 2067
254. Philip, L., Clotilde, C. R., Fourie, J., Abraham, L. and Dave, B. MADIBA: A web server toolkit for biological interpretation of *Plasmodium* and plant gene clusters. *BMC Genomics*. **9**, p.
255. Eisen, M. B., Spellman, P. T., Brown, P. O. and Botstein, D. (1998), Cluster analysis and display of genome-wide expression patterns. *Proceedings of the National Academy of Sciences*. **95**, p. 14863
256. Subramanian, A., Tamayo, P., Mootha, V. K., Mukherjee, S., Ebert, B. L., Gillette, M. A., Paulovich, A., Pomeroy, S. L., Golub, T. R., Lander, E. S. and Mesirov, J. P. (2005), Gene set enrichment analysis: A knowledge-based approach for interpreting genome-wide expression profiles. *Proceedings of the National Academy of Sciences of the United States of America*. **102**, p. 15545-15550
257. Copois, V., Bibeau, F., Bascoul-Molleivi, C., Salvetat, N., Chalbos, P., Bareil, C., Candeil, L., Fraslou, C., Conseiller, E. and Granci, V. (2007), Impact of RNA degradation on gene expression profiles: assessment of different methods to reliably determine RNA quality. *Journal of Biotechnology*. **127**, p. 549-559
258. Denisov, V., Strong, W., Walder, M., Gingrich, J. and Wintz, H. (2008), Development and validation of RQI: An RNA quality indicator for the Experion automated electrophoresis system. *Bio-Rad Bulletin*. **5761**, p.
259. van Brummelen, A. C., Olszewski, K. L., Wilinski, D., Llinás, M., Louw, A. I. and Birkholtz, L. M. (2009), Co-inhibition of *Plasmodium falciparum* S-adenosylmethionine

- decarboxylase/ornithine decarboxylase reveals perturbation-specific compensatory mechanisms by transcriptome, proteome, and metabolome analyses. *Journal of Biological Chemistry*. **284**, p. 4635
260. Huang, D. W., Sherman, B. T. and Lempicki, R. A. (2009), Systematic and integrative analysis of large gene lists using DAVID bioinformatics resources. *Nature protocols*. **4**, p. 44-57
261. Sherman, B. T. and Lempicki, R. A. (2009), Bioinformatics enrichment tools: paths toward the comprehensive functional analysis of large gene lists. *Nucleic Acids Research*. **37**, p. 1-13
262. Natalang, O., Bischoff, E., Deplaine, G., Proux, C., Dillies, M. A., Sismeiro, O., Guigon, G., Bonnefoy, S., Patarapotikul, J. and Mercereau-Puijalon, O. (2008), Dynamic RNA profiling in *Plasmodium falciparum* synchronized blood stages exposed to lethal doses of artesunate. *BMC Genomics*. **9**, p. 388
263. Chaal, B. K., Gupta, A. P., Wastuwidyaningtyas, B. D., Luah, Y.-H. and Bozdech, Z. (2010), Histone Deacetylases Play a Major Role in the Transcriptional Regulation of the *Plasmodium falciparum* Life Cycle. *PLoS Pathog*. **6**, p. e1000737
264. Page, R. D. M. (1996), An application to display phylogenetic trees on personal computers. *Computer Applications in the Biosciences*. **12**, p.
265. Saldanha, A. J. (2004), Java Treeview—extensible visualization of microarray data. *Bioinformatics*. **20**, p. 3246-3248
266. Date, S. V. and Stoeckert, C. J. (2006), Computational modeling of the *Plasmodium falciparum* interactome reveals protein function on a genome-wide scale. *Genome Research*. **16**, p. 542-549
267. Snel, B., Lehmann, G., Bork, P. and Huynen, M. A. (2000), STRING: a web-server to retrieve and display the repeatedly occurring neighbourhood of a gene. *Nucleic Acids Res*. **28**, p. 3442-3444
268. Szklarczyk, D., Franceschini, A., Kuhn, M., Simonovic, M., Roth, A., Minguetz, P., Doerks, T., Stark, M., Muller, J., Bork, P., Jensen, L. J. and von Mering, C. (2011), The STRING database in 2011: functional interaction networks of proteins, globally integrated and scored. *Nucleic Acids Res*. **39**, p. D561-568
269. Kuhn, M., Szklarczyk, D., Franceschini, A., von Mering, C., Jensen, L. J. and Bork, P. (2012), STITCH 3: zooming in on protein–chemical interactions. *Nucleic Acids Research*. **40**, p. D876-D880
270. Kuhn, M., von Mering, C., Campillos, M., Jensen, L. J. and Bork, P. (2008), STITCH: interaction networks of chemicals and proteins. *Nucleic Acids Res*. **36**, p. D684-688
271. Birkholtz, L., Joubert, F., Neitz, A. W. H. and Louw, A. I. (2003), Comparative properties of a three-dimensional model of *Plasmodium falciparum* ornithine decarboxylase. *Proteins: Structure, Function and Genetics*. **50**, p. 464-473
272. Assaraf, Y. G., Golenser, J., Spira, D. T., Messer, G. and Bachrach, U. (1987), Cytostatic effect of DL-alpha-difluoromethylornithine against *Plasmodium falciparum* and its reversal by diamines and spermidine. *Parasitology Research*. **73**, p. 313-318
273. Ubbink, J. B., van der Merwe, A., Delport, R., Allen, R. H., Stabler, S. P., Riezler, R. and Vermaak, W. (1996), The effect of a subnormal vitamin B-6 status on homocysteine metabolism. *Journal of Clinical Investigation*. **98**, p. 177
274. Kanellis, P., Gagliardi, M., Banath, J. P., Szilard, R. K., Nakada, S., Galicia, S., Sweeney, F. D., Cabelof, D. C., Olive, P. L. and Durocher, D. (2007), A screen for suppressors of gross chromosomal rearrangements identifies a conserved role for PLP in preventing DNA lesions. *PLoS Genetics*. **3**, p. e134
275. Huq, M. D. M., Tsai, N.-P., Lin, Y.-P., Higgins, L. and Wei, L.-N. (2007), Vitamin B6 conjugation to nuclear corepressor RIP140 and its role in gene regulation. *Nat Chem Biol*. **3**, p. 161-165

276. Oka, T., Sugitatsu, H., Nordin, H., Thakur, M. K., Aoyama, M., Sasagawa, T., Suzuki, I. and Tsuji, H. (2001), Pyridoxal 5'-phosphate inhibits DNA binding of HNF1. *Biochimica et Biophysica Acta (BBA) - General Subjects*. **1568**, p. 189-196
277. Jochmann, N., Götter, S. and Tauch, A. (2011), Positive transcriptional control of the pyridoxal phosphate biosynthesis genes *pdxST* by the MocR-type regulator PdxR of *Corynebacterium glutamicum* ATCC 13032. *Microbiology*. **157**, p. 77-88
278. Vermeersch, J. J., Christmann-Franck, S., Karabashyan, L. V., Femandjian, S., Mirambeau, G. and Der Garabedian, P. A. (2004), Pyridoxal 5'-phosphate inactivates DNA topoisomerase IB by modifying the lysine general acid. *Nucleic Acids Research*. **32**, p. 5649-5657
279. Read, M., Muller, I., Mitchell, S., Sims, P. and Hyde, J. (2010), Dynamic subcellular localization of isoforms of the folate pathway enzyme serine hydroxymethyltransferase (SHMT) through the erythrocytic cycle of *Plasmodium falciparum*. *Malaria Journal*. **9**, p. 351
280. Salcedo, E., Sims, P. F. G. and Hyde, J. E. (2005), A glycine-cleavage complex as part of the folate one-carbon metabolism of *Plasmodium falciparum*. *Trends in Parasitology*. **21**, p. 406-411
281. McMillan, P. J., Stimmler, L. M., Foth, B. J., McFadden, G. I. and Müller, S. (2005), The human malaria parasite *Plasmodium falciparum* possesses two distinct dihydrolipoamide dehydrogenases. *Molecular Microbiology*. **55**, p. 27-38
282. Douce, R., Bourguignon, J., Neuburger, M. and Rébeillé, F. (2001), The glycine decarboxylase system: a fascinating complex. *Trends in Plant Science*. **6**, p. 167-176
283. Sirawaraporn, W., Sirawaraporn, R., Cowman, A. F., Yuthavong, Y. and Santi, D. V. (1990), Heterologous expression of active thymidylate synthase-dihydrofolate reductase from *Plasmodium falciparum*. *Biochemistry*. **29**, p. 10779-10785
284. Babbitt, S. E., Altenhofen, L., Cobbold, S. A., Istvan, E. S., Fennell, C., Doerig, C., Llinás, M. and Goldberg, D. E. (2012), *Plasmodium falciparum* responds to amino acid starvation by entering into a hibernatory state. *Proceedings of the National Academy of Sciences*. **109**, p. E3278–E3287
285. McHardy, A. C., Tauch, A., Rückert, C., Pühler, A. and Kalinowski, J. (2003), Genome-based analysis of biosynthetic aminotransferase genes of *Corynebacterium glutamicum*. *Journal of Biotechnology*. **104**, p. 229-240
286. El Qaidi, S., Yang, J., Zhang, J.-R., Metzger, D. W. and Bai, G. (2013), The Vitamin B6 biosynthesis pathway in *Streptococcus pneumoniae* is controlled by pyridoxal 5'-phosphate and the transcription factor PdxR, and impacts on ear infection. *Journal of Bacteriology*, p. Published ahead of print
287. Belitsky, B. R. and Sonenshein, A. L. (2002), GabR, a member of a novel protein family, regulates the utilization of γ -aminobutyrate in *Bacillus subtilis*. *Molecular Microbiology*. **45**, p. 569-583
288. Belitsky, B. R. (2004), *Bacillus subtilis* GabR, a Protein with DNA-binding and Aminotransferase Domains, is a PLP-dependent Transcriptional Regulator. *Journal of Molecular Biology*. **340**, p. 655-664
289. O'Neill, P. M., Barton, V. E. and Ward, S. A. (2010), The Molecular Mechanism of Action of Artemisinin—The Debate Continues. *Molecules*. **15**, p. 1705-1721
290. Jansen, F. H. (2010), The pharmaceutical death-ride of dihydroartemisinin. *Malaria Journal*. **9**, p. 212
291. Zhang, K., Bangs, J. D. and Beverley, S. M. (2010), Sphingolipids in parasitic protozoa. *Adv Exp Med Biol*. **688**, p. 238-248
292. Hanada, K. (2003), Serine palmitoyltransferase, a key enzyme of sphingolipid metabolism. *Biochim Biophys Acta*. **1632**, p. 16-30
293. Furuya, H., Shimizu, Y. and Kawamori, T. (2011), Sphingolipids in cancer. *Cancer Metastasis Rev*. **30**, p. 567-576

294. Le Roch, K. G., Johnson, J. R., Florens, L., Zhou, Y., Santrosyan, A., Grainger, M., Yan, S. F., Williamson, K. C., Holder, A. A., Carucci, D. J., Yates, J. R. and Winzeler, E. A. (2004), Global analysis of transcript and protein levels across the *Plasmodium falciparum* life cycle. *Genome Research*. **14**, p. 2308-2318
295. Holden, H. M., Thoden, J. B. and Raushel, F. M. (1999), Carbamoyl phosphate synthetase: an amazing biochemical odyssey from substrate to product. *Cellular and Molecular Life Sciences*. **56**, p. 507-522
296. Raushel, F. M., Thoden, J. B. and Holden, H. M. (1999), The amidotransferase family of enzymes: molecular machines for the production and delivery of ammonia. *Biochemistry*. **38**, p. 7891-7899
297. Flores, M. V. C. and Stewart, T. S. (1998), *Plasmodium falciparum*: A Microassay for the Malarial Carbamoyl Phosphate Synthetase. *Experimental Parasitology*. **88**, p. 243-245
298. Flores, M. V. C., O'Sullivan, W. J. and Stewart, T. S. (1994), Characterisation of the carbamoyl phosphate synthetase gene from *Plasmodium falciparum*. *Molecular and Biochemical Parasitology*. **68**, p. 315-318
299. Biagini, G. A., O'Neill, P. M., Nzila, A., Ward, S. A. and Bray, P. G. (2003), Antimalarial chemotherapy: young guns or back to the future? *Trends in Parasitology*. **19**, p. 479-487
300. Eliot, A. C. and Kirsch, J. F. (2004), Pyridoxal phosphate enzymes: mechanistic, structural, and evolutionary considerations. *Annual Review of Biochemistry*. **73**, p. 383-415
301. Dick, T., Manjunatha, U., Kappes, B. and Gengenbacher, M. (2010), Vitamin B6 biosynthesis is essential for survival and virulence of *Mycobacterium tuberculosis*. *Molecular Microbiology*. **78**, p. 980-988
302. Titiz, O., Tambasco-Studart, M., Warzych, E., Apel, K., Amrhein, N., Laloi, C. and Fitzpatrick, T. B. (2006), PDX1 is essential for vitamin B6 biosynthesis, development and stress tolerance in Arabidopsis. *The Plant Journal*. **48**, p. 933-946
303. Akana, J., Fedorov, A. A., Fedorov, E., Novak, W. R. P., Babbitt, P. C., Almo, S. C. and Gerlt, J. A. (2006), D-Ribulose 5-Phosphate 3-Epimerase: Functional and Structural Relationships to Members of the Ribulose-Phosphate Binding (β/α)₈-Barrel Superfamily. *Biochemistry*. **45**, p. 2493-2503
304. Caruthers, J., Bosch, J., Buckner, F., Van Voorhis, W., Myler, P., Worthey, E., Mehlin, C., Boni, E., DeTitta, G., Luft, J., Lauricella, A., Kalyuzhniy, O., Anderson, L., Zucker, F., Soltis, M. and Hol, W. G. J. (2006), Structure of a ribulose 5-phosphate 3-epimerase from *Plasmodium falciparum*. *Proteins: Structure, Function, and Bioinformatics*. **62**, p. 338-342
305. Atamna, H., Pascarmona, G. and Ginsburg, H. (1994), Hexose-monophosphate shunt activity in intact *Plasmodium falciparum*-infected erythrocytes and in free parasites. *Molecular and Biochemical Parasitology*. **67**, p. 79-89
306. Roth Jr, E. F., Ruprecht, R. M., Schulman, S., Vanderberg, J. and Olson, J. A. (1986), Ribose metabolism and nucleic acid synthesis in normal and glucose-6-phosphate dehydrogenase-deficient human erythrocytes infected with *Plasmodium falciparum*. *Journal of Clinical Investigation*. **77**, p. 1129-1135
307. Wamelink, M. M. C., Struys, E. A., Huck, J. H. J., Roos, B., van der Knaap, M. S., Jakobs, C. and Verhoeven, N. M. (2005), Quantification of sugar phosphate intermediates of the pentose phosphate pathway by LC-MS/MS: application to two new inherited defects of metabolism. *Journal of Chromatography B*. **823**, p. 18-25