

BIOSKETCH



Professor Pascal MICHON (PhD)

Deputy Vice-Chancellor

Address: National University of Vanuatu
Avenue Léopold Sédar SENGHOR
PO Box 3431
Port-Vila, Vanuatu

Date of Birth: 4 December 1959

Email: pascal.michon@univ.edu.vu / michon.pascal@gmail.com ;

Phone: +678 29 792 (Ext. 102) / + 678 777 80 15 (Vanuatu mobile)

LinkedIn: <https://www.linkedin.com/in/pascalmichon/>

Facebook: <https://www.facebook.com/michon.pascal/>

Nationality: French

Languages: French (mother tongue); English (2nd Language; fluent: written, spoken); Spanish (fluent: written, spoken); Tok Pisin (PNG); Bislama (Vanuatu)

Regional experience: Papua New Guinea, Vanuatu

ACADEMIC DEGREES

- ◆ PhD in Molecular Parasitology (2001), University of Notre Dame, USA
- ◆ MSc. in Parasitology: Ecology and Pathology (1987) University of Montpellier (USTL), France
- ◆ BSc. in Organismal Biology (1985) Faculty of Sciences, Poitiers, France

TEACHING EXPERIENCE / SUPERVISION

- ◆ Tutor in Chemistry (2024; National University of Vanuatu, Bachelor of Environmental Sciences)
- ◆ Senior Lecturer in Chemistry & Biochemistry, tutor in Chemistry, Biochemistry, Cell & Molecular Biology (2015- 2020; at the Department of Medicine, DWU)
- ◆ Senior Lecturer in Research Ethics and co-supervisor for Master students in the Master of Public Health (2019-2020; flexible mode and partly online at DWU)

ACADEMIC EXPERIENCE / ADMINISTRATION

- ◆ Deputy Vice-Chancellor, National University of Vanuatu (2021- ...)
- ◆ Member of the Senate, National University of Vanuatu (2023- ...)
- ◆ Chair of the Academic and Assessment Board of the National University of Vanuatu (2024-...)
- ◆ Board Member of the Vanuatu Institute of Public Administration and Management (2024 -...)
- ◆ External Monitor of the Vanuatu Agriculture College Internal Audit Committee (2023-...)
- ◆ Senior Lecturer, Faculty of Health Sciences and then Faculty of Medicine & Health Sciences (2010-2021; DWU)

- ◆ Chair of the Faculty of Health Sciences and then Faculty of Medicine & Health Sciences Research Committee (2010-2019)
- ◆ Chair of the Faculty of Health Sciences and then Faculty of Medicine & Health Sciences Curriculum & Assessment Committee (2010-2018)
- ◆ Dean of the Faculty of Health Sciences, Divine Word University, Madang, PNG (2010-2015)

RESEARCH EXPERIENCE

- ◆ Trained in Next Generation sequencing technology using the Nanopore MinION platform with the Global Scientific Solution for Health (GSSH) (2019 - DWU).
- ◆ Research Coordinator at Faculty of Medicine & Health Sciences organizing research training & research discussions for staff (2015-2019; DWU)
- ◆ Malaria Senior Research Fellow, Head of Molecular Parasitology, PNG Institute of Medical Research, Madang, PNG (2004-2010)
- ◆ Postdoctoral Research Fellowship: Molecular Epidemiology of malaria with Pr. Karen Day. The Peter Medawar Building for Pathogen Research / Department of Zoology, University of Oxford, UK. (2001-2003)
- ◆ Research Fellow as PhD candidate: “Erythrocyte Binding Proteins of *Plasmodium vivax* and *P. knowlesi*: a molecular and phylogenetic approach”; supervisor: John H. Adams, PhD - Department of Biological Sciences, University of Notre Dame, USA (1995-2000)

CURRENT RESEARCH INTERESTS

- ◆ Environmental Sciences
- ◆ Climate Change
- ◆ Environmental Health
- ◆ Molecular Epidemiology of Infectious Diseases
- ◆ Non-communicable Diseases and Nutrition
- ◆ Basic Science & Science education

RESEARCH PROJECTS & FUNDING

- ◆ World Trade Organization (WTO) Chairs Program representative for Vanuatu (2025 – present).
- ◆ SMART Subsea Cables: Implementing for Geophysics, Early Warning and Oceans, Vanuatu-New Caledonia to Global (2022-26); project funded by the Gordon and Betty Moore Foundation.
- ◆ Climate cHange and the future of coAstal CommuNities: transformation of soCiality, livElihoods and lifeStyle in the South Pacific (CHANCES-Pacific - 2023-25); funded by the European Union (grant agreement no. FED/2020/421-373) under the ACP Innovation Fund (Ref. EuropeAid/166663/IH/ ACT/Multi), part of the OACPS Research and Innovation Programme.
- ◆ Understanding lifestyle behaviours in the Pacific using human-centered artificial intelligence from activity sensors and nutrition digital tools (2022-23); project funded by the “Fonds Pacifique”
- ◆ Traditional Childhood Medicine in the Pacific Islands: state of play of beneficial and risky practices (2022-23); project funded by the “Fonds Pacifique”
- ◆ SPAR-Pacific project: Indigenous knowledge, practices, and resilience in the Pacific Islands

- ◆ Family farming Lifestyle & Health in the Pacific (FALAH: 2021-2025); project funded by the Marie Skłodowska-Curie Actions; Research and Innovation Staff Exchange (RISE) H2020-MSCA-RISE-2019

MEMBERSHIPS

- ◆ Member of the Vanuatu National Health Research Ethics Committee (2025 – present)
- ◆ Member of the Board of the Vanuatu Institute of Public Administration (VIPAM) (2024 – present)
- ◆ Member of the Pacific Islands Universities Research Network (PIURN) (<https://piurn.org/member-universities-pacific-island-universities-research-network/>)
 - co-representative for Divine Word University: 2018-2021
 - representative for the National University of Vanuatu: 2021 - present

PUBLICATIONS (* Authors contributed equally; ¶ Authors' long list (or part of an international consortium)

1. Tudal, R., Palaud, B., Charley, J., Metmetsam, J-C., Napuk, D., Tavoue, J-D., Vira, A., Yokai, J., Vivier, A-S., Michon, P., Hnawia, E. & Chassagne, F. (2025). La médecine traditionnelle infantile au Vanuatu : enquêtes sur les îles de Santo et d'Efaté. *Ethnopharmacologia*, 71-72, pp.126-145.
2. MalariaGEN, Adam I, Alam MS ... Michon, P., et al. (2022) An open dataset of Plasmodium vivax genome variation in 1,895 worldwide samples. *Wellcome Open Research*, 7:136 (<https://doi.org/10.12688/wellcomeopenres.17795.1>)
3. Band, G., Le, Q. S., Clarke, G. M., Kivinen, K., Hubbard, C., Jeffreys, A. E., ... Michon, P., ... Kwiatkowski, D. P. (2019). Insights into malaria susceptibility using genome-wide data on 17,000 individuals from Africa, Asia and Oceania. *Nature Communications*, 10(1), 5732. <https://doi.org/10.1038/s41467-019-13480-z>
4. Clarke, G. M., Rockett, K., Kivinen, K., Hubbard, C., Jeffreys, A. E., Rowlands, K., ... Michon, P., . . . , Kwiatkowski, D. P. (2017). Characterisation of the opposing effects of G6PD deficiency on cerebral malaria and severe malarial anaemia. *Elife*, 9(6), 15085.
5. Pearson, R. D., Amato, R., Auburn, S., Miotto, O., Almagro-Garcia, J., Amaratunga, C., ... Michon, P., ..., Kwiatkowski, D. P. (2016). Genomic analysis of local variation and recent evolution in Plasmodium vivax. *Nature Genetics*, 48(8), 959-964.
6. MalariaGEN Plasmodium falciparum Community Project.¶ Genomic epidemiology of artemisinin resistant malaria. (2016). *Elife*, 4(5), 08714.
7. Manning, L., Cutts, J., Stanicic, D. I., Laman, M., Carmagnac, A., Allen, S., ... Michon, P., . . . , Mueller, I. (2016). A Toll-like receptor-1 variant and its characteristic cellular phenotype is associated with severe malaria in Papua New Guinean children. *Genes and Immunity*, 17(1), 52-59.
8. The Malaria Genomic Epidemiology Network¶ (2014). Reappraisal of known malaria resistance loci in a large multicenter study. *Nature Genetics*, 6(11):1197-204.
9. Preston, M.D., Campino, S., Assefa, S.A., Echeverry, D.F., Ocholla, H., Amambua-Ngwa, A., ... Michon, P., ... Clark, T.G. (2014). A barcode of organellar genome polymorphisms identifies the geographic origin of Plasmodium falciparum strains. *Nature Communications*, 5, 4052.

10. Preston, M.D., Assefa, S., Ocholla, H., Sutherland, C., Borrmann, S., Nzila, A., Michon, P., ... Clark, T.G. (2014). PlasmoView: A web-based resource to visualise global malaria genomic variation. *Journal of Infectious Diseases*, 209(11), 1808-15.
11. Manning, L., Laman, M., Rosanas-Urgell, A., Michon, P., Aipit, S., Bona, C., ... Davis, T.M. (2012). Severe anemia in Papua New Guinean children from a malaria-endemic area: a case-control etiologic study. *PLoS Neglected Tropical Diseases*, 6(12): e1972. doi: 10.1371/journal.pntd.0001972. Epub 2012 Dec 13.
12. Rosanas-Urgell, A., Senn, N., Rarau, P., Aponte, J.J., Reeder, J.C., Siba, P.M., Michon, P. & Mueller, I. (2012). Lack of associations of α^+ -thalassemia with risk of *P. falciparum* and *P. vivax* infection and disease in a cohort of children 3-21 months from Papua New Guinea. *International Journal for Parasitology*, 42(12), 1107-13.
13. Rosanas-Urgell, A., Lin, E., Manning, L., Rarau, P., Laman, M., Senn, N., ... Michon, P. & Mueller, I. (2012). Reduced risk of *Plasmodium vivax* in Papua New Guinean children with Southeast Asian Ovalocytosis in Two Cohorts and a Case-Control Study. *PLoS Medicine* 9(9), e1001305. Epub 2012 Sep 4.
14. Reiling, L., Richards, J.S., Fowkes, F.J.I., Wilson, D., Chokejindachai, W., Barry, A., ... Michon, P., ... Beeson, J.G. (2012). The *Plasmodium falciparum* erythrocyte invasion ligand PfRh4 as a target of functional and protective human antibodies against malaria. *PLoS One* 7(9), e45253. doi:10.1371/journal.pone.0045253. Epub 2012 Sep 20
15. Manske, M., Miotto, O., Campino, S., Auburn, S., Almagro-Garcia, J., Maslen, G., O'Brien, J., ... Michon, P., ... Kwiatkowski, D.P. (2012). Analysis of *Plasmodium falciparum* diversity in natural infections by deep sequencing. *Nature*, 487(7407), 375-379.
16. Manning, L., Laman, M., Law, I., Bona, C., Aipit, S., Teine, D., ... Michon, P., ... Davis, T.M.E. (2011). Features and prognosis of severe malaria caused by *Plasmodium falciparum*, *Plasmodium vivax* and mixed *Plasmodium* species in Papua New Guinean children. *PLoS ONE*, 6(12): e29203.
17. Wilson, D.W., Fowkes, F.J.I., Gilson, P.R., Elliott, S.R., Tavul, L., Michon, P., ... Beeson, J.G. (2011). Quantifying the importance of MSP1-19 as a target of growth-inhibitory and protective antibodies against *Plasmodium falciparum* in humans. *PLoS ONE*, 6(11), e27705.
18. Campino, S., Auburn, S., Kivinen, K., Zongo, I., Ouedraogo, J.B., Mangano, V., ... Michon, P., ... Kwiatkowski, D.P. (2011). Population Genetic Analysis of *Plasmodium falciparum* Parasites Using a Customized Illumina GoldenGate Genotyping Assay. *PLoS ONE*, 6(6), e20251.
19. Reiling, L., Richards, J.S., Fowkes, F.J., Barry, A.E., Triglia, T., Chokejindachai, W., Michon, P., ... Beeson, J.G. (2010). Evidence that the erythrocyte invasion ligand PfRh2 is a target of protective immunity against *Plasmodium falciparum* malaria. *The Journal of Immunology* 185(10), 6157-67.
20. Lin, E., Tavul, L., Michon, P., Richards, J.S., Dabod, E., Beeson, ... Mueller, I. (2010). Minimal association of common red blood cell polymorphisms with risk of *P. falciparum* infection and uncomplicated malaria in Papua New Guinean school children. *American Journal of Tropical Medicine and Hygiene*, 83(4), 828-33.
21. Richards, J.S., Stanisic, D.I., Fowkes, F.J., Tavul, L., Dabod, E., ... Michon, P., ... Beeson, J.G. (2010). Association between naturally acquired antibodies to erythrocyte-binding antigens of *Plasmodium falciparum* and protection from malaria and high-density parasitemia. *Clinical Infectious Diseases*, 51(8), e50-60.
22. Sutherland, C.J., Tanomsing, N., Nolder, D., Oguike, M., Jennison, C., Pukrittayakamee, S., ... Michon, P., ... Polley, S.D. (2010). Two Non-recombining Sympatric Forms of the Human Malaria Parasite *Plasmodium ovale* Occur Globally. *The Journal of Infectious Diseases*, 201(10), 1544-50.

23. Cole-Tobian, J. L., Michon, P., Baisor, M., Richards, J. S., Beeson, J. G., Mueller, I., & King, C. L. (2009). Strain-Specific Duffy Binding Protein antibodies correlate with protection against infection with homologous compared to heterologous *Plasmodium vivax* strains in Papua New Guinean children. *Infection and Immunity*, 77(9), 4009-4017.
24. Stanisic, D.I., Richards, J., McCallum, F.J., Michon, P., King, C.L., Schoepflin, S., ... Beeson, J.G. (2009) IgG subclass-specific responses against *Plasmodium falciparum* merozoite antigens are associated with control of parasitemia and protection from symptomatic illness. *Infection and Immunity*, 77(3), 1165-74.
25. Robinson, L.J., D'Ombrain, M.C., Stanisic, D.I., Taraika, J., Bernard, N., Richards, ... Michon, P., ... Schofield, L. (2009). Cellular TNF, IFN- γ and IL-6 responses: correlates of immunity and risk of clinical *Plasmodium falciparum* malaria in children from Papua New Guinea. *Infection and Immunity*, 77(7), 3033-43.
26. Jallow, M., Teo, Y. Y., Small, K. S., Rockett, K. A., Deloukas, P., Clark, T. G., . . . Michon, P., ... Kwiatkowski, D. P. (2009). Genome-wide and fine-resolution association analysis of malaria in West Africa. *Nature Genetics*, 41(6), 657-665.
27. Tavul, L., Mueller, I., Rare L., Lin, E., Zimmerman, P.A., Reeder, J.C., ... Michon, P. (2008). Glycophorin C Δ^{exon3} is not associated with protection against severe malarial anemia in Papua New Guinea. *PNG Medical Journal*, 51(3-4), 149-54.
28. The Malaria Genomic Epidemiology Network[¶] (2008). A global network for investigating the genomic epidemiology of malaria. *Nature*, 456 (7223), 732-7
29. D'Ombrain, M.C., Robinson, L.J., Stanisic, D.I., Taraika, J., Bernard, N., Michon, P., ... Schofield, L. (2008). Association of early interferon-gamma production with immunity to clinical malaria: a longitudinal study among Papua New Guinean children. *Clinical Infectious Diseases*, 47(11), 1380-7.
30. Karl, S., David, M., Moore, L., Grimberg, B.T., Michon, P., Mueller, I., ... Zimmerman, P.A. (2008). Enhanced detection of gametocytes by magnetic deposition microscopy predicts higher potential for *Plasmodium falciparum* transmission *Malaria Journal*, 7, 66.
31. King, C.L., Michon, P., Shakri, A.R., Marcotty, A., Stanisic, D., Cole-Tobian, J. L., ... Chitnis, C.E. (2008). Naturally Acquired Blocking Antibodies against the Receptor-Binding Domain of Duffy Binding Protein are Associated with Protection against *Plasmodium vivax* Infection. *Proceedings of the National Academy of Sciences, U S A*, 105(24), 8363-8.
32. Fowkes, F.J.I.*, Michon, P.*, Pilling, L., Ripley, R.M., Tavul, L., Imrie, H., ... Day, K.P. (2008). Host erythrocyte polymorphisms and exposure to *Plasmodium falciparum* in Papua New Guinea. *Malaria Journal*, 7, 1.
33. Cole-Tobian, J. L., Michon, P., Mueller, I. & King, C. L. (2007). The Dynamics of Asymptomatic *Plasmodium vivax* Infection and Duffy Binding Protein Polymorphisms in Relation to Parasitemia Levels in Papua New Guinean Children. *American Journal of Tropical Medicine and Hygiene*, 77, 955- 62.
34. Tanomsing, N., Imwong, M., Pukrittayakamee, S., Chotivanich, K., Looareesuwan, S., Mayxay, M., ... Michon, P., ... Day, N. P. J. (2007). Genetic analysis of the dihydrofolate reductase-thymidylate synthase gene from diverse geographic isolates of *Plasmodium malariae*. *Antimicrobial Agents Chemotherapy*, 51(10), 3523-30.
35. Michon, P., Cole-Tobian, J. L., Dabod, E., Schoepflin, S., Igu, J., Susapu, M., ... Mueller, I. (2007). The risk of malarial infections and disease in Papua New Guinean children. *American Journal of Tropical Medicine and Hygiene*, 76(6), 997-1008.

36. DaRe, J.T., Mehlotra, R.K., Michon, P., Mueller, I., Reeder, J.C., Stoneking, M. & Zimmerman, P.A. (2007). Microsatellite polymorphism within pfcr1 provides evidence of continuing evolution of chloroquine-resistant haplotypes. *Malaria Journal*, 6 (1), 34.
37. Wildig, J.*, Michon, P.*, Siba, P., Mellombo, M., Ura, A., Mueller, I. & Cossart, Y. (2006). Parvovirus B19 contributes to severe anaemia among young children in Papua New Guinea. *The Journal of Infectious Diseases*, 194(2), 146-53.
38. Imrie, H., Fowkes, F.J.I., Michon, P., Tavul, L., Reeder, J.C. & Day, K.P. (2007). Low prevalence of an acute phase response in asymptomatic children from a malaria endemic area of Papua New Guinea. *American Journal of Tropical Medicine and Hygiene*, 76 (2), 280-84.
39. Imrie, H., Fowkes, F., Michon, P., Tavul, L., Hume, J., Piper, K., ... Day, K.P. (2006). Haptoglobin levels are associated with haptoglobin genotype and alpha+-thalassemia in a malaria endemic area. *American Journal of Tropical Medicine and Hygiene*, 74(6), 965-71.
40. Fowkes, F.J.I., Imrie, H., Migot-Nabias, F., Michon, P., Justice, A., Deloron, P., ... Day, K.P. (2006) Association of haptoglobin levels with age, parasite density, and haptoglobin genotype in a malaria- endemic area of Gabon. *American Journal of Tropical Medicine and Hygiene*, 74(1), 26-30.
41. Michon, P., Stevens, J., Kaneko, O. & Adams, J.H. (2002). Evolutionary relationships of conserved cysteine-rich motifs in adhesive molecules of malaria parasites. *Molecular Biology and Evolution*, 19(7), 1128-42.
42. Michon, P., Woolley, I., Wood, E.M., Kastens, W., Zimmerman, P.A. & Adams, J.H. (2001). Duffy-null promoter heterozygosity reduces DARC expression and abrogates adhesion of the P. vivax ligand required for blood-stage infection. *FEBS letters*, 495(1-2), 111-114.
43. Michon, P., Fraser, T. & Adams, J.H. (2000). Naturally acquired and vaccine elicited antibodies block erythrocyte cytoadherence of the Plasmodium vivax Duffy binding protein. *Infection and Immunity*, 68(6), 3164-3171.
44. Michon, P., Arevalo-Herrera, M., Fraser, T., Herrera, S. & Adams, J.H. (1998). Serologic responses to recombinant Plasmodium vivax Duffy binding protein in a Colombian village. *American Journal of Tropical Medicine and Hygiene*, 59(4), 597-599.
45. Fraser, T., Michon, P., Barnwell, J.W., Noe, A.R., Al-Yaman, F., Kaslow, D.C. & Adams, J.H. (1997). Expression and serologic activity of a soluble recombinant Plasmodium vivax Duffy binding Protein. *Infection and Immunity*, 65, 2772-2777.
46. Sereno, D., Michon, P., Brajon, N. & Lemesre, J-L. (1997). Phenotypic characterization of Leishmania mexicana pentamidine-resistant promastigotes. Modulation of the resistance during in-vitro developmental life cycle. *Comptes Rendus de L'Académie des Sciences III*, 320(12), 981-987.