

Supplementary Materials

Table S1a. Significance of Jdate and Year interaction terms in mixed effect models.

		All samples	Excluding CO, OTH
Jdate*Year, Jdate*Site	Weight	no sig.	no sig.
	Hematocrit	Jdate*Year (p=0.031)	no sig.
	WBC	Jdate*Site (p=0.050)	no sig.
	Parasitemia	Jdate*Year (p=0.018)	Jdate*Year (p=0.044)
	Survivorship	no sig.	no sig.
Year*Site	Weight	no sig.	no sig.
	Hematocrit	no sig.	no sig.
	WBC	no sig.	no sig.
	Parasitemia	no sig.	no sig.
	Survivorship	no sig.	no sig.

Table S1b. Mixed effect multivariate models with significant Jdate or Year interaction terms.

		Jdate*Site		Jdate*Year		InfStatus		Year		Jdate		Site		n
		F	P	F	P	F	p	F	p	F	p	F	p	
All Samples	Hematocrit	n/a	n/a	4.694	0.031	0.439	0.781	4.323	0.039	4.685	0.031	2.636	0.106	245
	WBC	3.892	0.050	n/a	n/a	1.761	0.139	0.327	0.568	7.864	0.006	3.834	0.052	175
	Parasitemia	n/a	n/a	5.710	0.018	18.962	0.000	6.849	0.010	5.707	0.018	0.627	0.430	161
Excluding CO, OTH	Parasitemia	n/a	n/a	4.143	0.044	52.804	0.000	5.248	0.024	4.140	0.044	0.384	0.537	136

Table S2. Mixed effect multivariate models for parasitemia and host weight, hematocrit, WBC, and survivorship including CO and OTH samples.

		InfStatus		Year		Jdate		Site		n
		F	p	F	p	F	p	F	p	
Linear models	Weight	2.623	0.035	11.367	0.001	20.290	0.000	6.112	0.014	257
	Hematocrit	0.369	0.830	1.701	0.193	13.573	0.000	9.143	0.003	245
	WBC	1.585	0.181	0.581	0.447	6.109	0.014	0.017	0.896	175
	Parasitemia	20.233	0.000	12.367	0.001	1.886	0.172	1.572	0.212	161
Binomial logistic model	Survivorship ^A	1.351	0.253	7.642	0.006	6.011	0.015	1.023	0.313	207

^A e^β for year and Jdate was 0.523 and 0.949, respectively.

Table S3. Mixed effect models with parasitemia as a controlled effect including CO and OTH samples.

		Parasitemia		InfStatus		Year		Jdate		Site		n
		F	P	F	p	F	p	F	p	F	p	
Linear models	Weight	3.152	0.078	1.206	0.310	5.152	0.025	3.338	0.070	3.523	0.062	159
	Hematocrit	2.604	0.109	1.155	0.329	2.546	0.113	1.465	0.228	6.858	0.010	153
	WBC	0.054	0.817	1.444	0.232	0.459	0.499	8.116	0.005	0.071	0.791	161
Binomial logistic model	Survivorship ^A	0.072	0.789	1.599	0.192	7.319	0.008	2.938	0.089	1.115	0.293	159

^A e^β for year and Jdate was 0.476 and 0.951, respectively.