

***Research article***
**Characterisation and comparison of the mucosa-associated bacterial communities across the gastrointestinal tract of stranded green turtles, *Chelonia mydas***

**Mohammad Shamim Ahasan<sup>1,2,\*</sup>, Thomas B. Waltzek<sup>3</sup>, Leigh Owens<sup>1</sup> and Ellen Ariel<sup>1</sup>**

<sup>1</sup> College of Public Health, Medical and Veterinary Sciences, James Cook University, Townsville, 4811, Qld, Australia

<sup>2</sup> Faculty of Veterinary and Animal Sciences, Hajee Mohammad Danesh Science and Technology University, Dinajpur 5200, Rangpur, Bangladesh

<sup>3</sup> College of Veterinary Medicine, University of Florida, Gainesville, FL, 32610, USA

\* Correspondence: Email: mdshamim.ahasan@my.jcu.edu.au; Tel: +61469851186.

**Supplementary Tables**

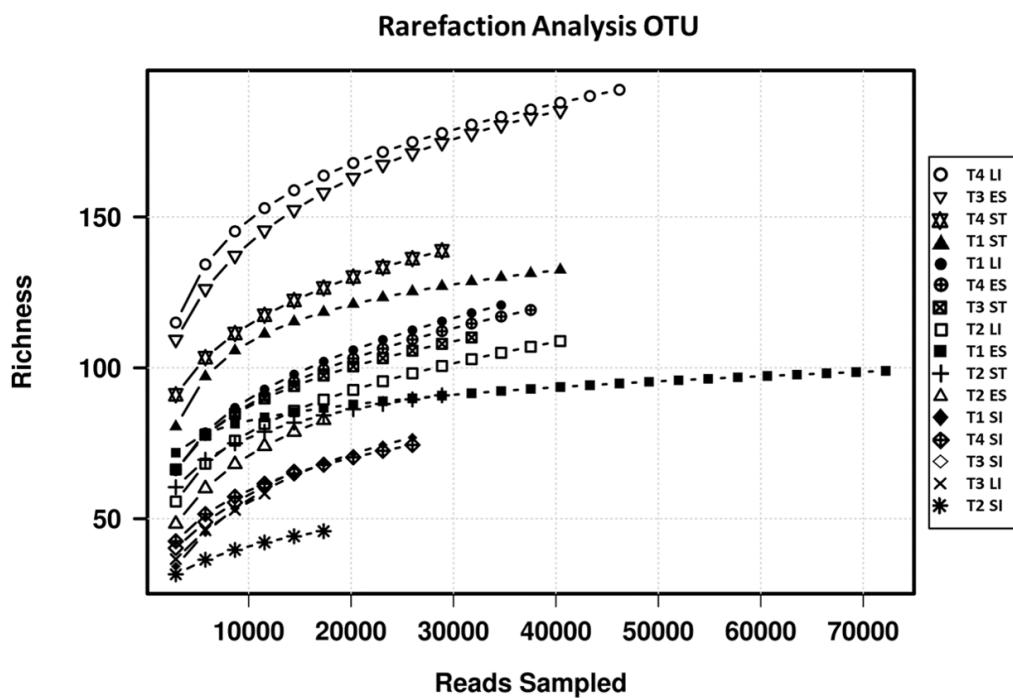
**Table S1.** Identification number, age-class and morphometric data of each green turtle at arrival. T1: turtle 1, T2: turtle 2, T3: turtle 3 and T4: turtle 4.

Details	T 1	T 2	T 3	T 4
Identification number	QA54944	QA56724	QA56888	QA56344
Location	Whitsunday Beach, QLD	Whitsunday Beach, QLD	Whitsunday Beach, QLD	Whitsunday Beach, QLD
Age-class	Juvenile	Juvenile	Juvenile	Adult
Body weight (kg)	6.1	8.2	12	100
CCL (cm)	48	48.2	52.3	102

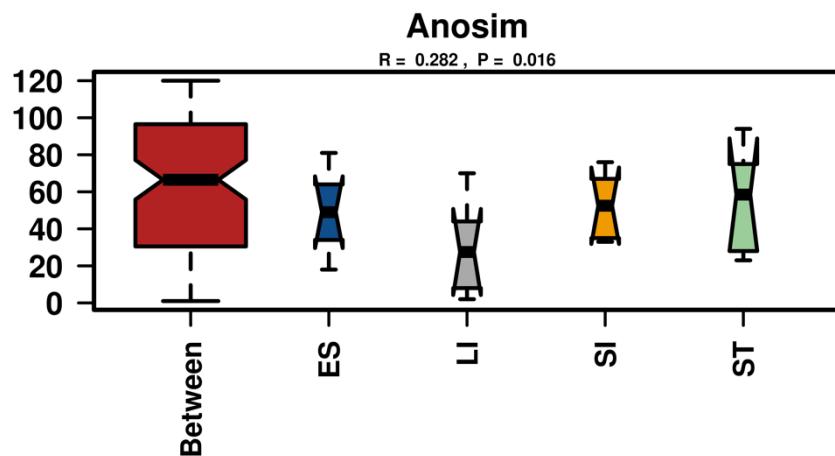
**Table S2.** The abundance of 11 shared OTUs across the gastrointestinal tract of green turtles. ES: Oesophagus, ST: Stomach, SI: Small intestine and LI: Large intestine.

Operational taxonomic units (OTU)	Cumulative abundance (%)			
	ES	ST	SI	LI
Proteobacteria_f_Vibrionaceae_17162	0.67	1.515	23.023	18.348
Fusobacteria_o_Fusobacteriales_19186	4.04	0.085	0.07	0.01
Firmicutes_g_Terrisporobacter_6106	0.05	0.775	0.008	0.09
Firmicutes_g_s_uncultured_Clostridium_sp._s_9532	0.775	7.345	0.298	6.17
Firmicutes_g_s_uncultured_bacterium_s_808	1.165	6.487	0.055	23.76
Firmicutes_g_s_uncultured_bacterium_s_20735	0.202	10.502	0.058	3.367
Firmicutes_g_Clostridium_sensu_stricto_1_14141	0.08	0.178	0.082	0.168
Firmicutes_g_Ambiguous_taxa_s_8680	5.46	2.282	0.158	0.012
Firmicutes_f_Peptostreptococcaceae_17846	0.922	10.912	0.62	2.203
Firmicutes_f_Clostridiaceae_1_7975	0.842	0.64	0.155	3.635
Cyanobacteria_c_Chloroplast_22627	0.022	0.028	0.188	0.04
Bacteroidetes_g_s_uncultured_bacterium_s_13932	0.67	1.515	23.023	18.348

## Supplementary Figures



**Figure S1.** Rarefaction analysis based on operational taxonomic unit (OTUs) (3% divergence) in the samples from different regions of the gastrointestinal tract of green turtles. ES: Oesophagus, ST: Stomach, SI: Small intestine and LI: Large intestine.



**Figure S2.** Analysis of Similarity (ANOSIM) in the samples from different regions of the gastrointestinal tract of green turtles using weighted UniFrac distance metric at OTU level.



AIMS Press

© 2020 the Author(s), licensee AIMS Press. This is an open access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>)