

SOMETHING COG

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PAPER DRAFT

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Abstract

Materials and Methods

Results

Discussion

Acknowledgements

Figures

COG Frequencies

Supplementary Figures

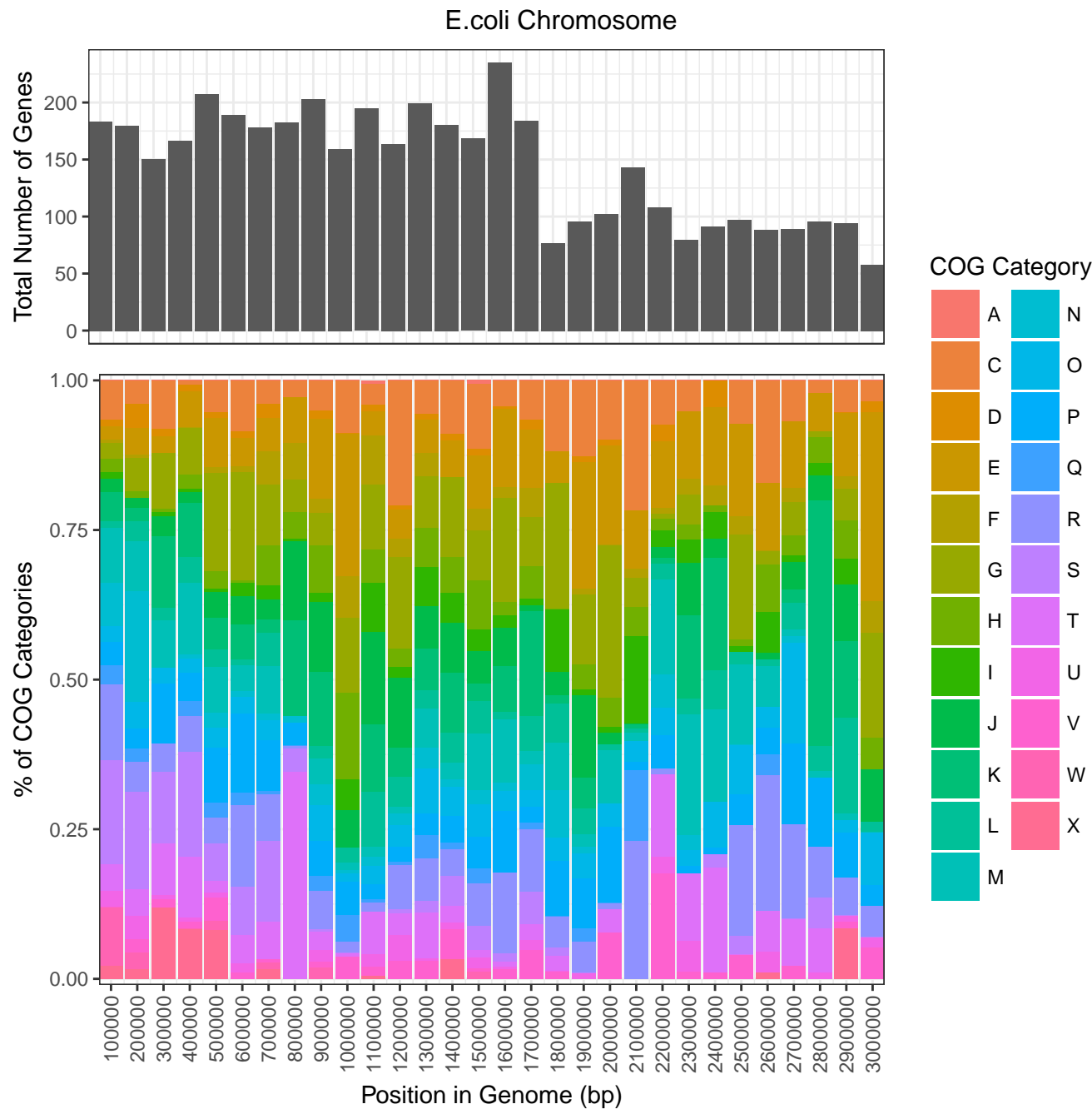


Figure 1: *E. coli*

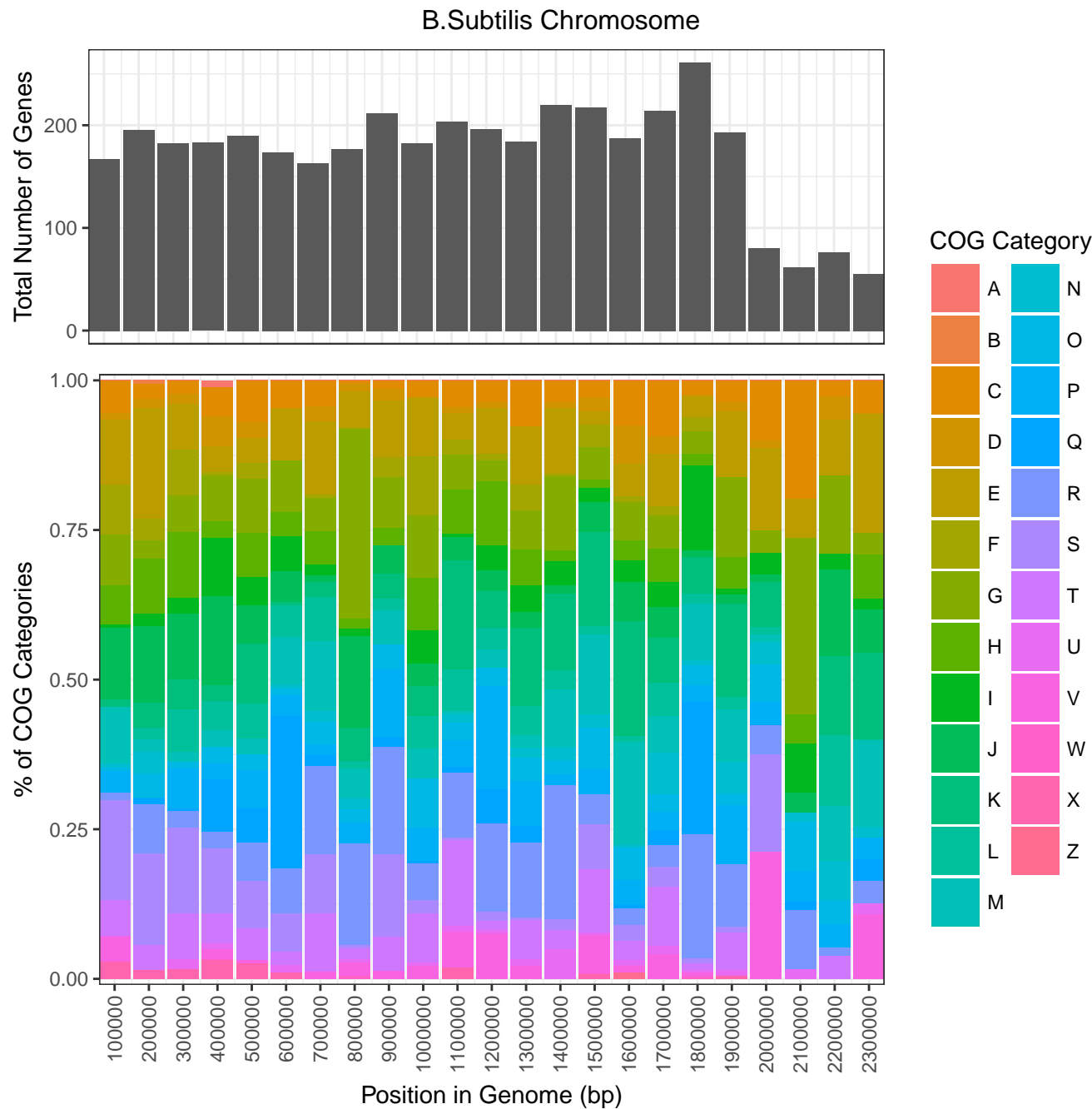


Figure 2: *B. subtilis*

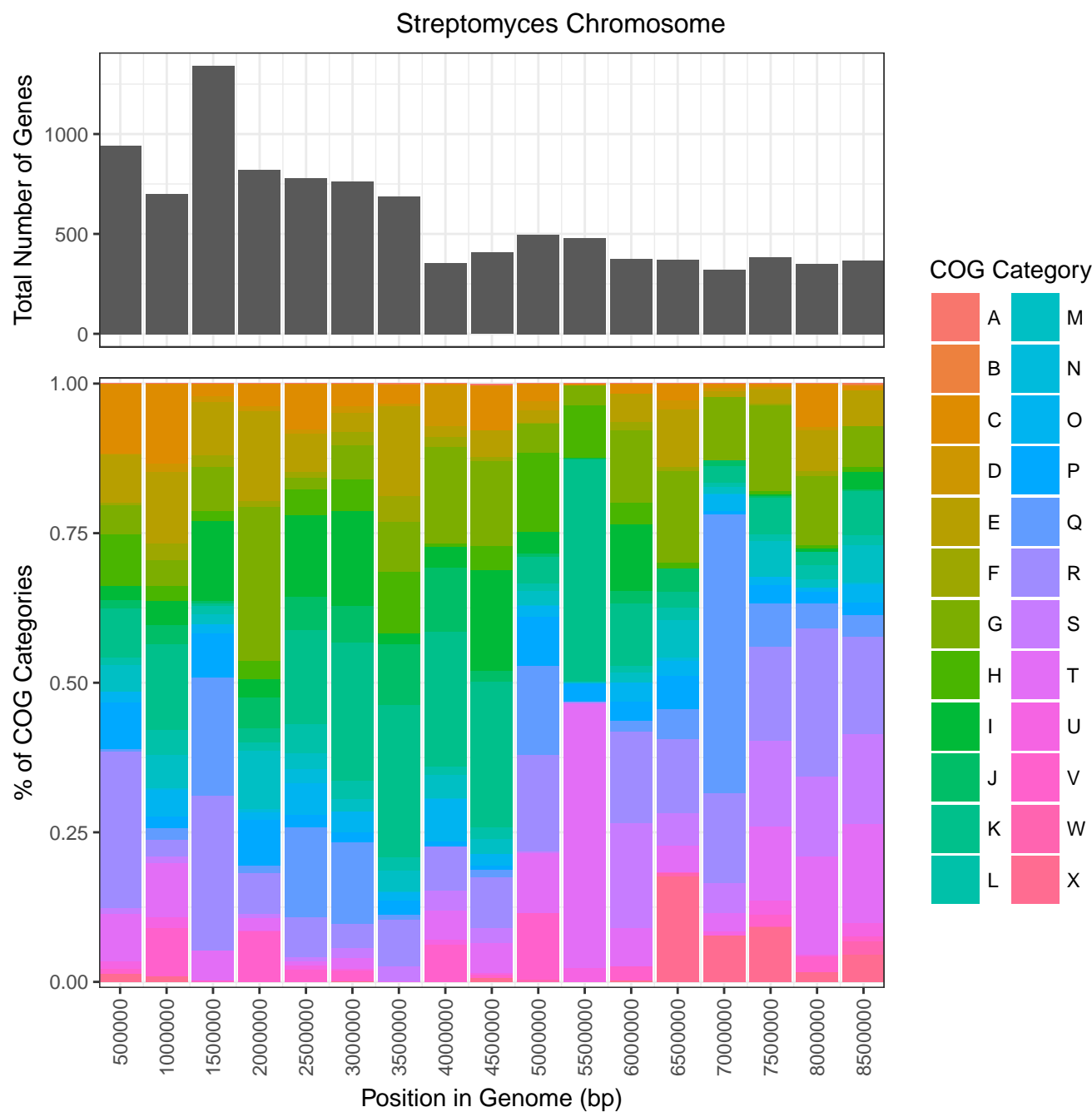


Figure 3: *Streptomyces*

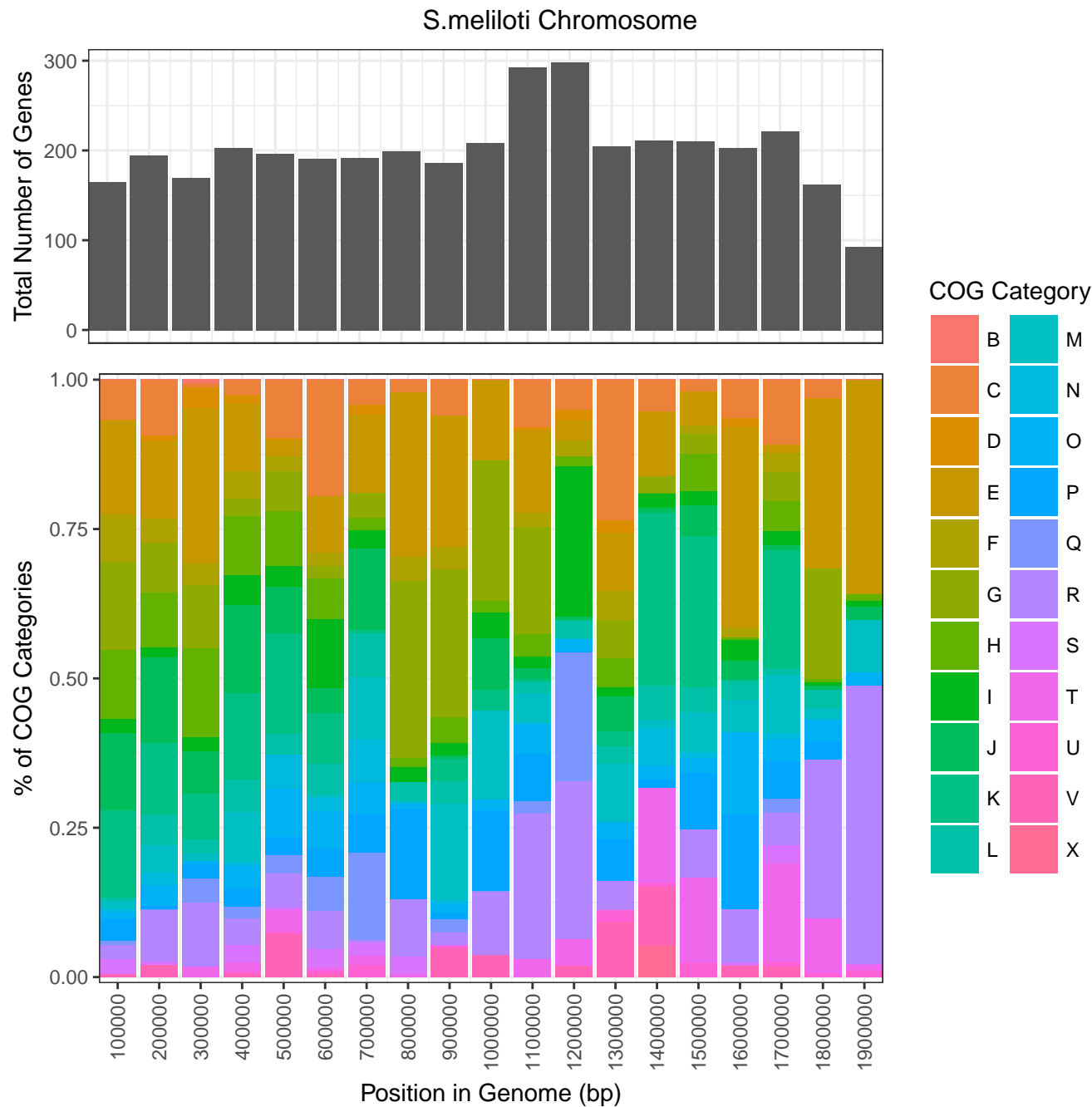


Figure 4: *S. meliloti* chrom

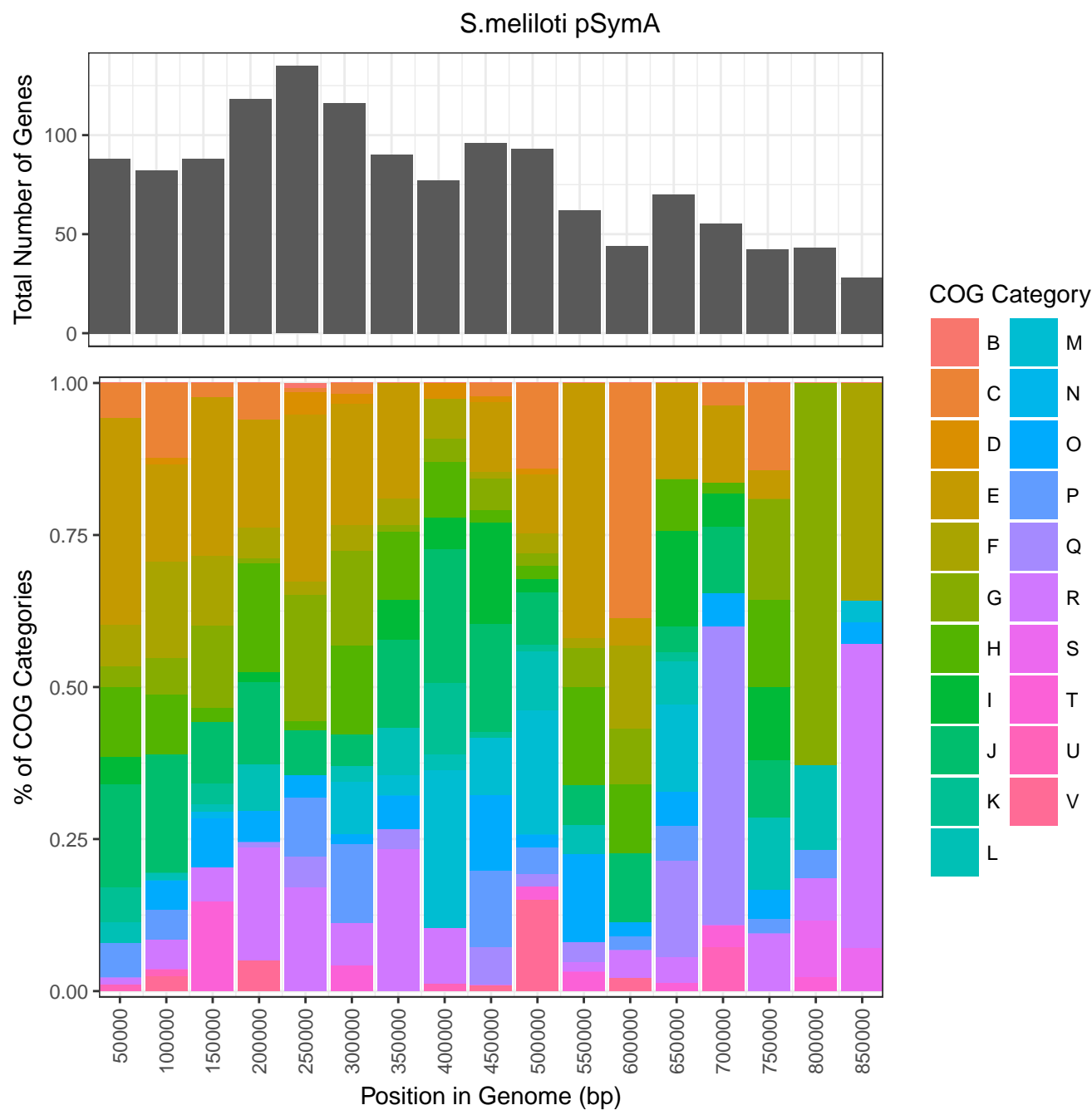


Figure 5: *Sinorhizobium* pSymA

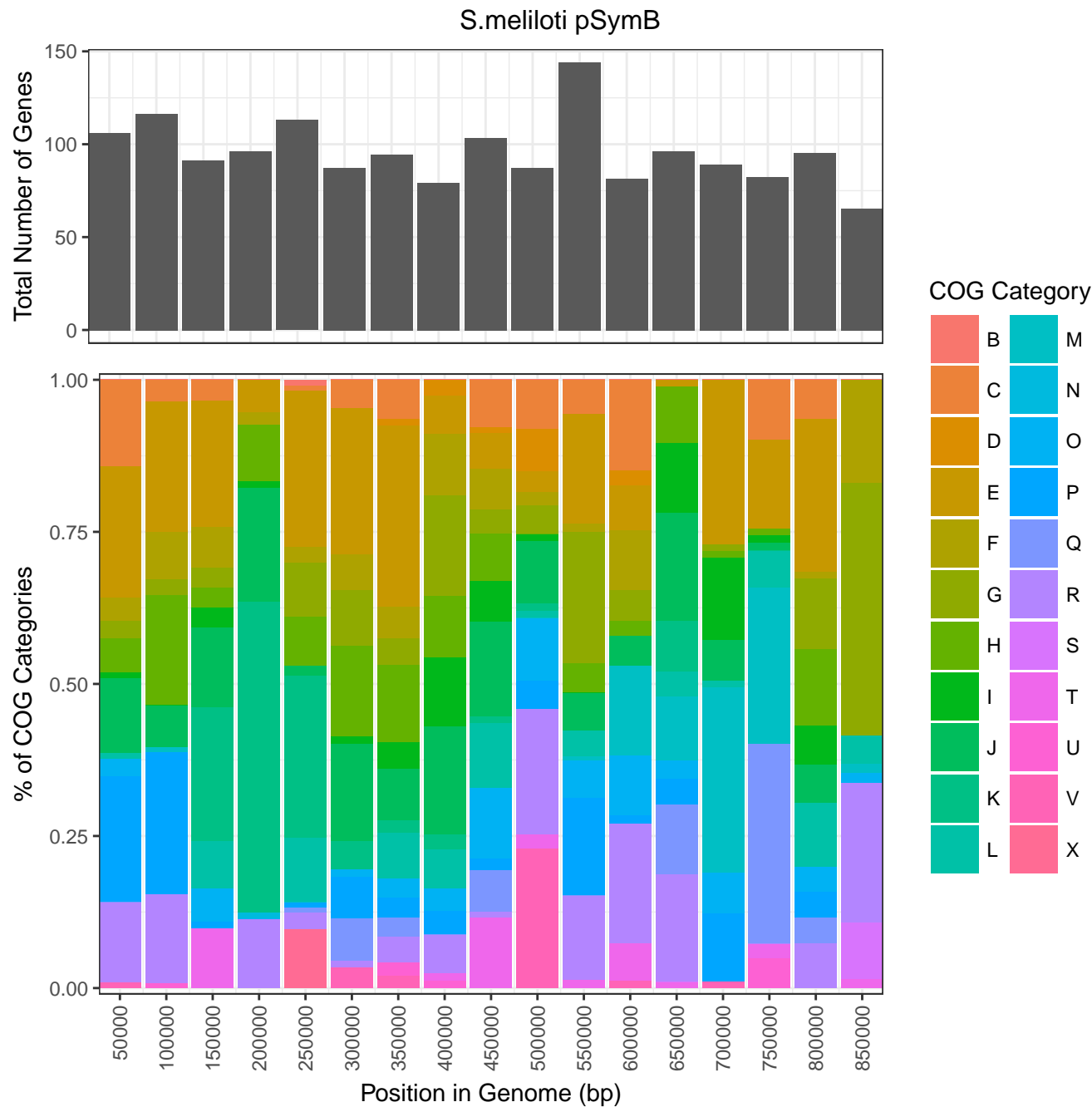


Figure 6: *Sinorhizobium* pSymB

Logistic Regression

COG Abbreviation	COG Category	<i>E. coli</i> Chromosome	<i>B. subtilis</i> Chromosome	<i>Streptomyces</i> Chromosome	<i>S. meliloti</i> Chromosome	<i>S. meliloti</i> pSymA	<i>S. meliloti</i> pSymB
C	Energy Production and Conversion	2.40×10 ⁻⁷	4.10×10 ⁻⁷	-2.94×10 ⁻⁷	NA	NA	NA
E	Amino Acid Transport and Metabolism	4.53×10 ⁻⁷	NA	-1.97×10 ⁻⁷	2.66×10 ⁻⁷	-2.08×10 ⁻⁶	-9.45×10 ⁻⁷
F	Nucleotide Transport and Metabolism	NA	-7.49×10 ⁻⁷	-1.86×10 ⁻⁷	-6.08×10 ⁻⁷	-1.15×10 ⁻⁶	NA
G	Carbohydrate Transport and Metabolism	NA	NA	NA	-2.53×10 ⁻⁷	9.78×10 ⁻⁷	2.05×10 ⁻⁶
H	Coenzyme Transport and Metabolism	NA	-4.07×10 ⁻⁷	-1.11×10 ⁻⁷	-1.20×10 ⁻⁶	-9.83×10 ⁻⁷	-1.45×10 ⁻⁶
I	Lipid Transport and Metabolism	4.51×10 ⁻⁷	3.74×10 ⁻⁷	-2.01×10 ⁻⁷	NA	2.01×10 ⁻⁶	1.84×10 ⁻⁶
J	Translation, Ribosomal Structure and Biogenesis	NA	-7.13×10 ⁻⁷	-1.36×10 ⁻⁷	1.23×10 ⁻⁶	-1.51×10 ⁻⁶	-1.15×10 ⁻⁶
K	Transcription	2.22×10 ⁻⁷	7.62×10 ⁻⁷	NA	NA	NA	-4.17×10 ⁻⁶
L	Replication, Recombination and Repair	2.95×10 ⁻⁷	NA	-1.17×10 ⁻⁷	NA	1.42×10 ⁻⁶	NA
M	Cell Wall/Membrane/Envelope Biogenesis	NA	5.18×10 ⁻⁷	-8.05×10 ⁻⁸	4.59×10 ⁻⁷	1.63×10 ⁻⁶	5.41×10 ⁻⁶
N	Cell Motility	-7.74×10 ⁻⁷	1.01×10 ⁻⁶	-2.04×10 ⁻⁷	NA	NA	NA
O	Posttranslational Modification, Protein Turnover, Chaperones	3.37×10 ⁻⁷	3.51×10 ⁻⁷	-7.75×10 ⁻⁸	3.47×10 ⁻⁷	NA	1.08×10 ⁻⁶
P	Inorganic Ion Transport and Metabolism	NA	NA	-1.68×10 ⁻⁷	5.36×10 ⁻⁷	NA	-2.05×10 ⁻⁶
Q	Secondary Metabolites Biosynthesis, Transport and Catabolism	NA	NA	NA	NA	4.28×10 ⁻⁶	3.81×10 ⁻⁶
T	Signal Transduction Mechanisms	NA	NA	1.52×10 ⁻⁷	1.85×10 ⁻⁶	NA	NA
U	Intracellular Trafficking, Secretion, and Vesicular Transport	NA	NA	NA	8.62×10 ⁻⁷	NA	NA
V	Defense Mechanisms	3.75×10 ⁻⁷	7.15×10 ⁻⁷	-1.21×10 ⁻⁷	4.24×10 ⁻⁷	NA	NA
W	Extracellular Structures	-3.23×10 ⁻⁶	NA	9.06×10 ⁻⁷	NA	NA	NA
X	Mobilome: Prophages, Transposons	-1.09×10 ⁻⁶	-1.81×10 ⁻⁶	4.32×10 ⁻⁷	1.67×10 ⁻⁶	NA	-3.35×10 ⁻⁶
R	General Function Prediction Only	2.61×10 ⁻⁷	3.20×10 ⁻⁷	-6.91×10 ⁻⁸	9.49×10 ⁻⁷	NA	NA
S	Function Unknown	-1.43×10 ⁻⁶	-1.19×10 ⁻⁶	4.62×10 ⁻⁷	-7.44×10 ⁻⁷	2.53×10 ⁻⁵	4.14×10 ⁻⁵