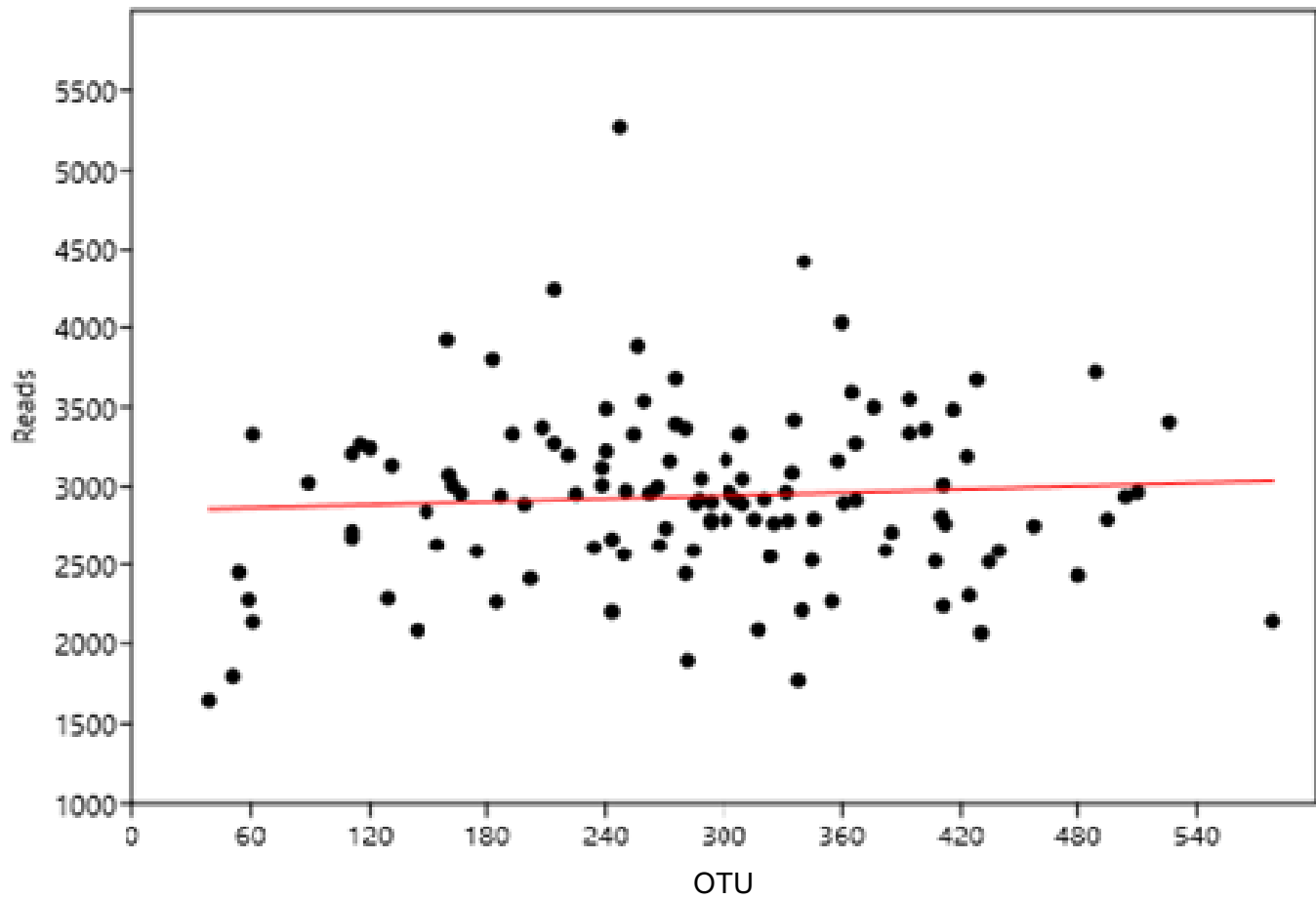


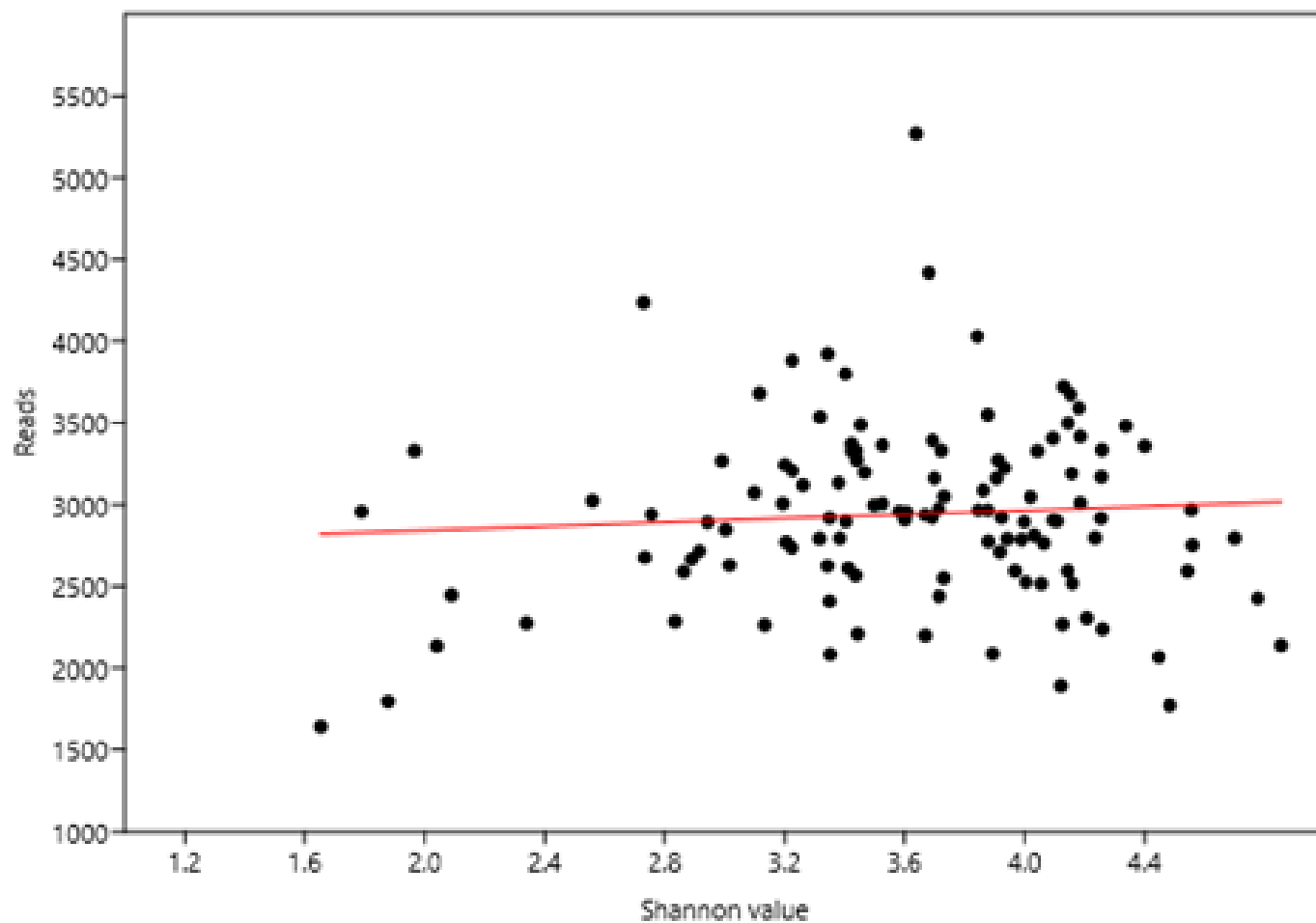
Suppl figures 1

Scatterplots representing number of reads related to number of OTU (taxa) and Shannon diversity index, per sample.

$$y = 0,3245x + 2848$$



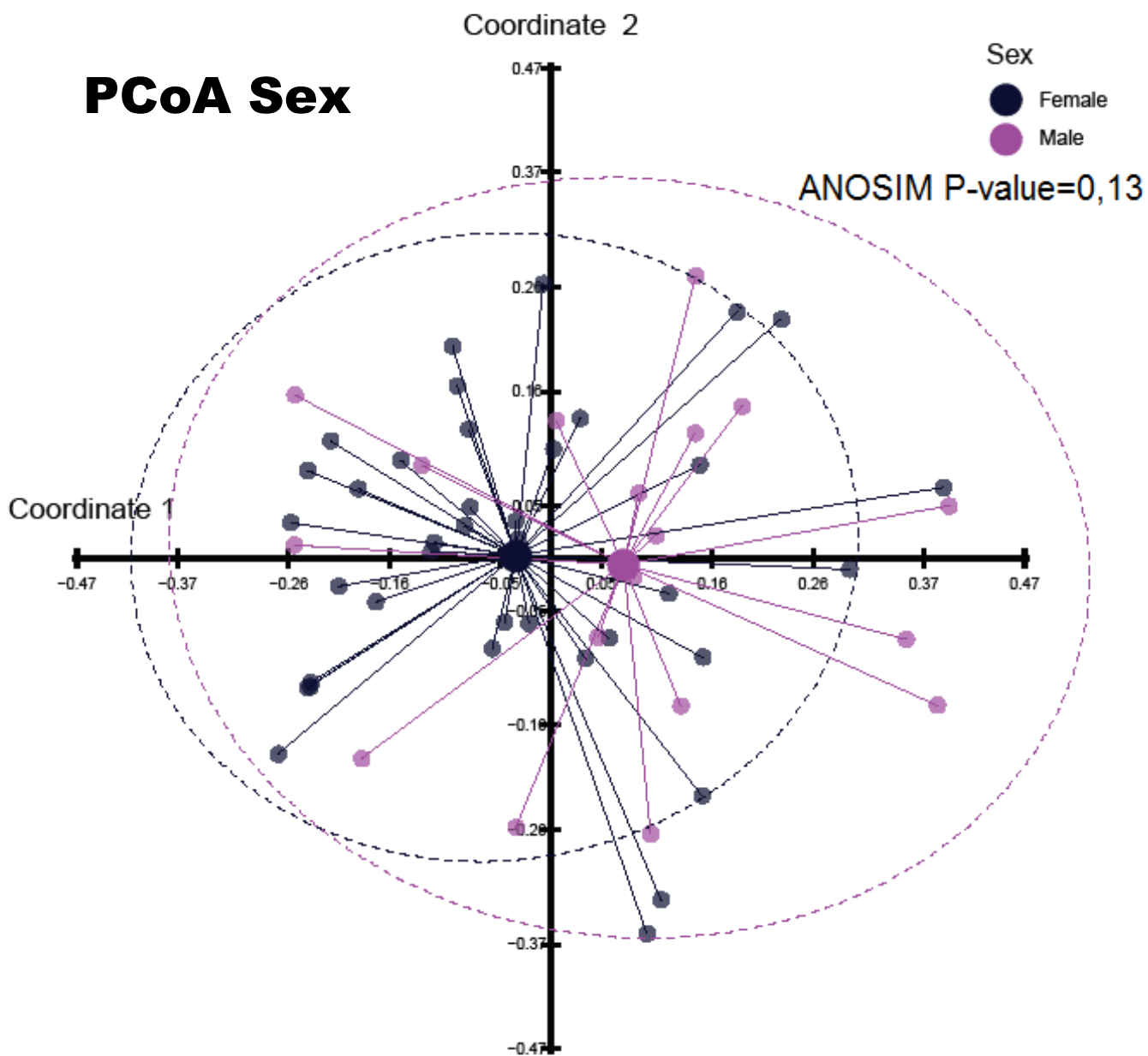
$$y = 61,77x + 2718$$



Suppl figures 2

PCoA and ANOSIM analyses of the impact of sex, age and BMI. BMI was grouped in lean (<25), overweight (25-30) and obese (>30).

PCoA Sex

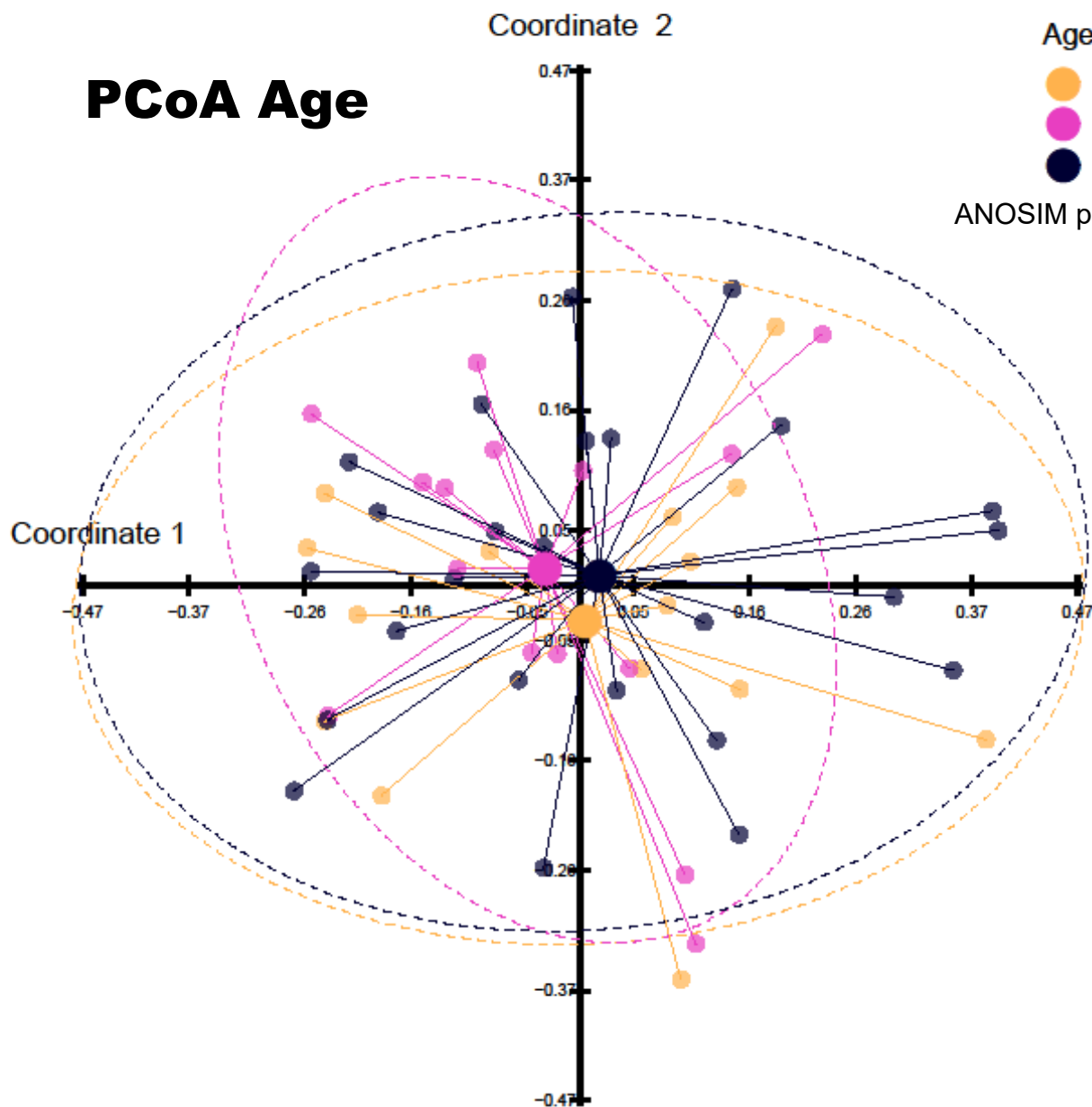


PCoA Age

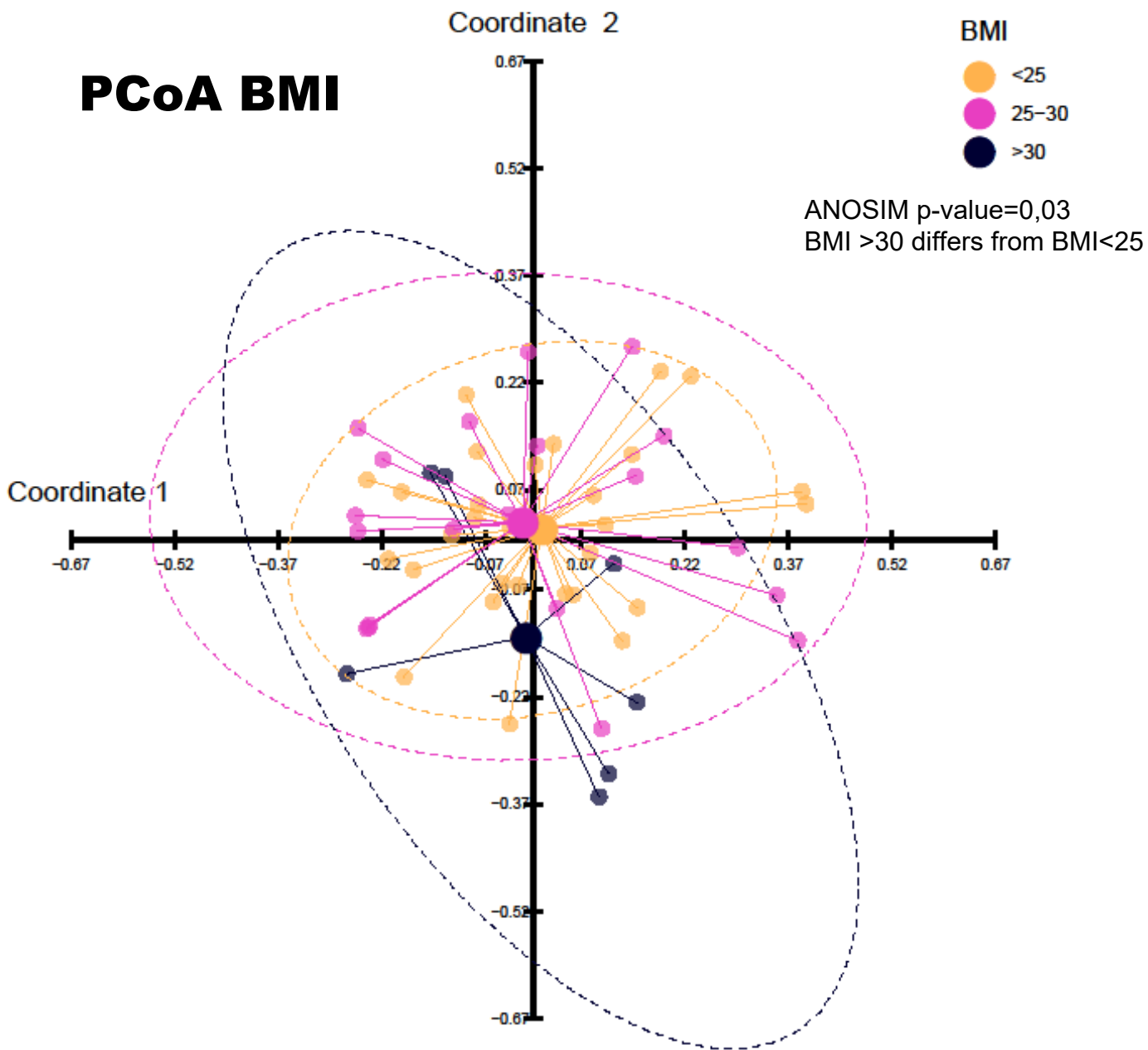
Age

- <60
- 60-65
- >65

ANOSIM p-value=0,48



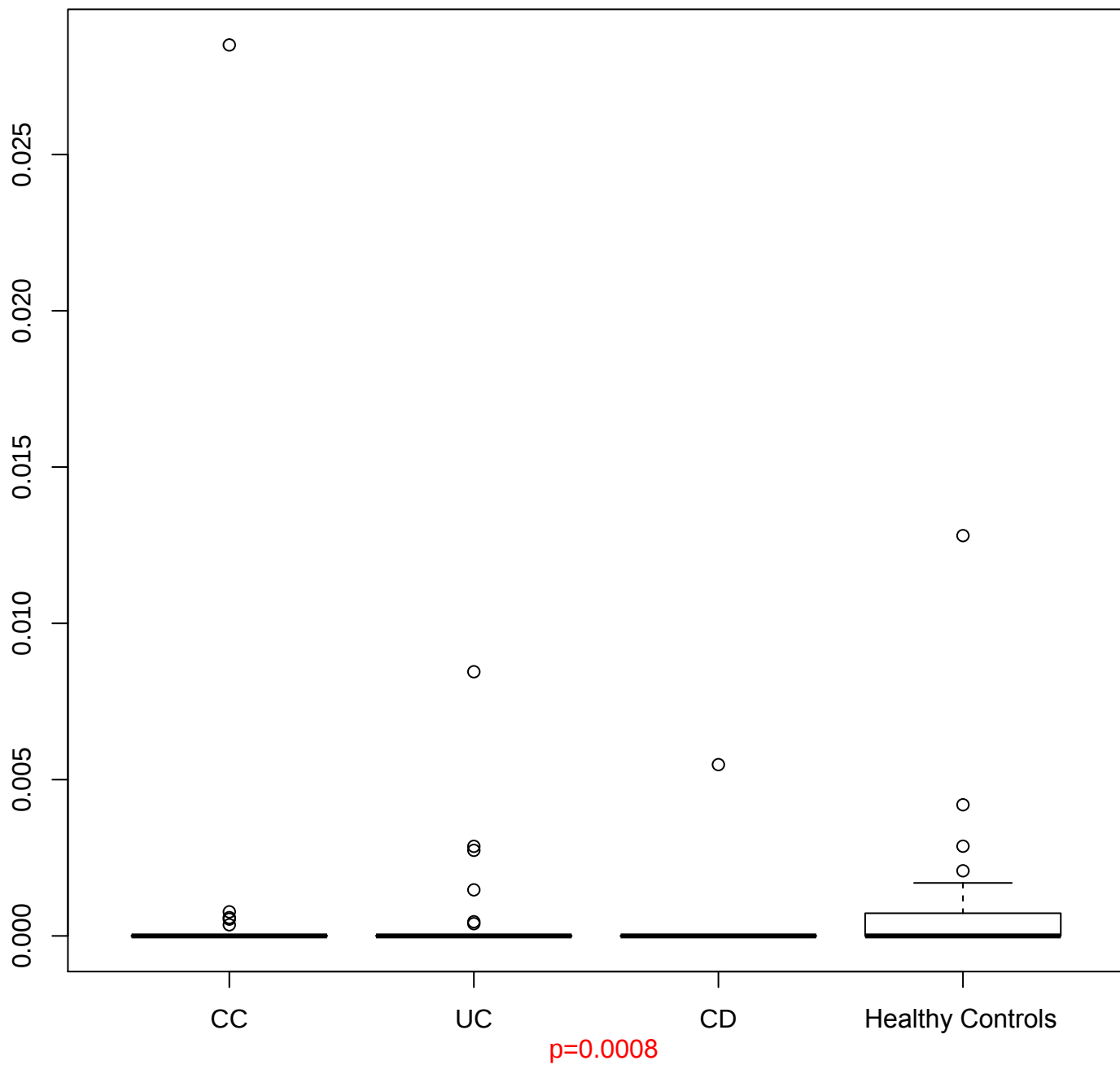
PCoA BMI



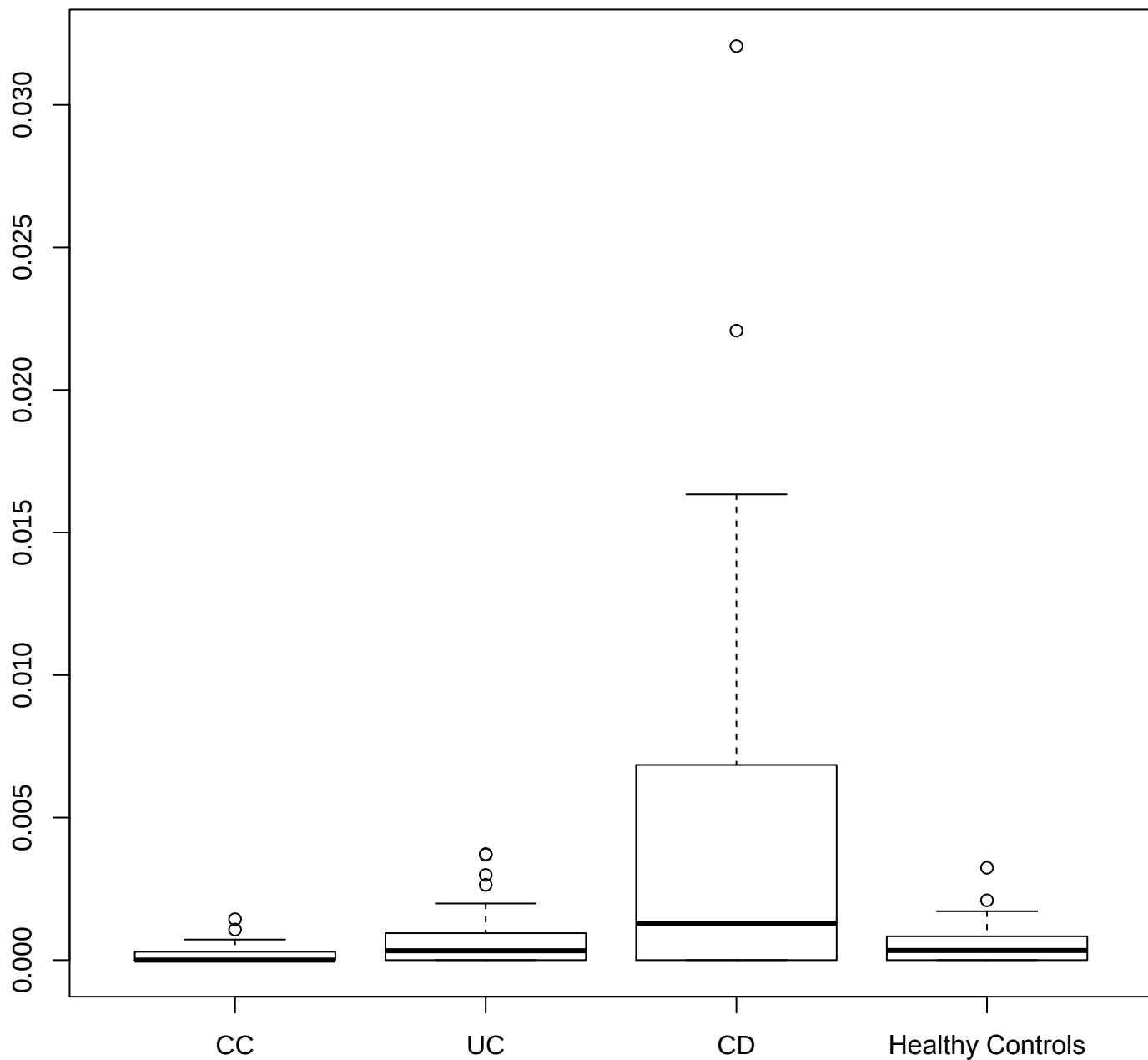
Supplemental figures 3

Relative abundance of taxa dispersing from healthy controls for collagenous colitis, ulcerative colitis, Crohn's disease and healthy controls (collagenous colitis; CC, ulcerative colitis, UC; Crohn's disease; CD).
(Comparisons were based on Kruskal-Wallis test).

Methanobrevibacter

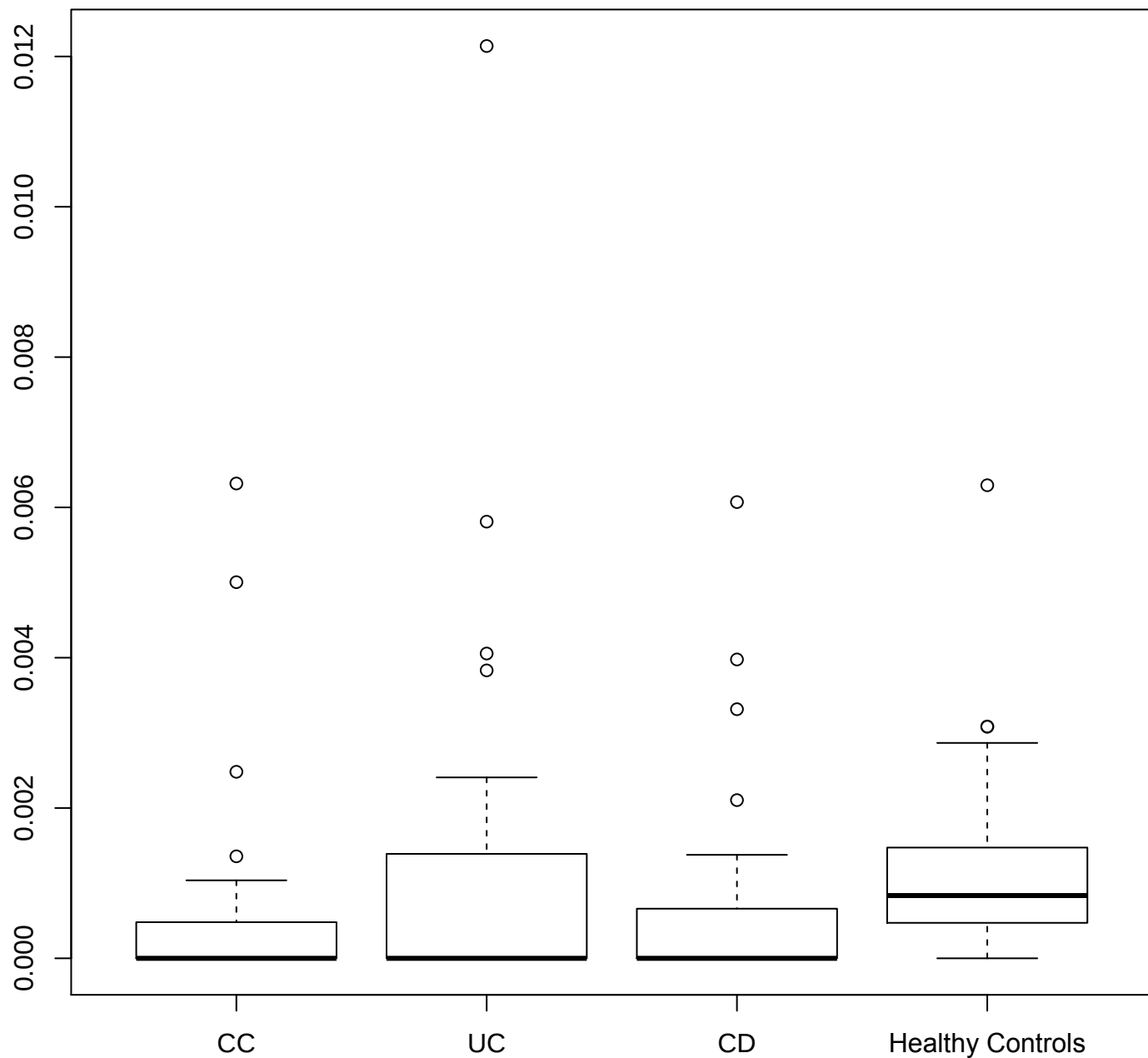


Collinsella



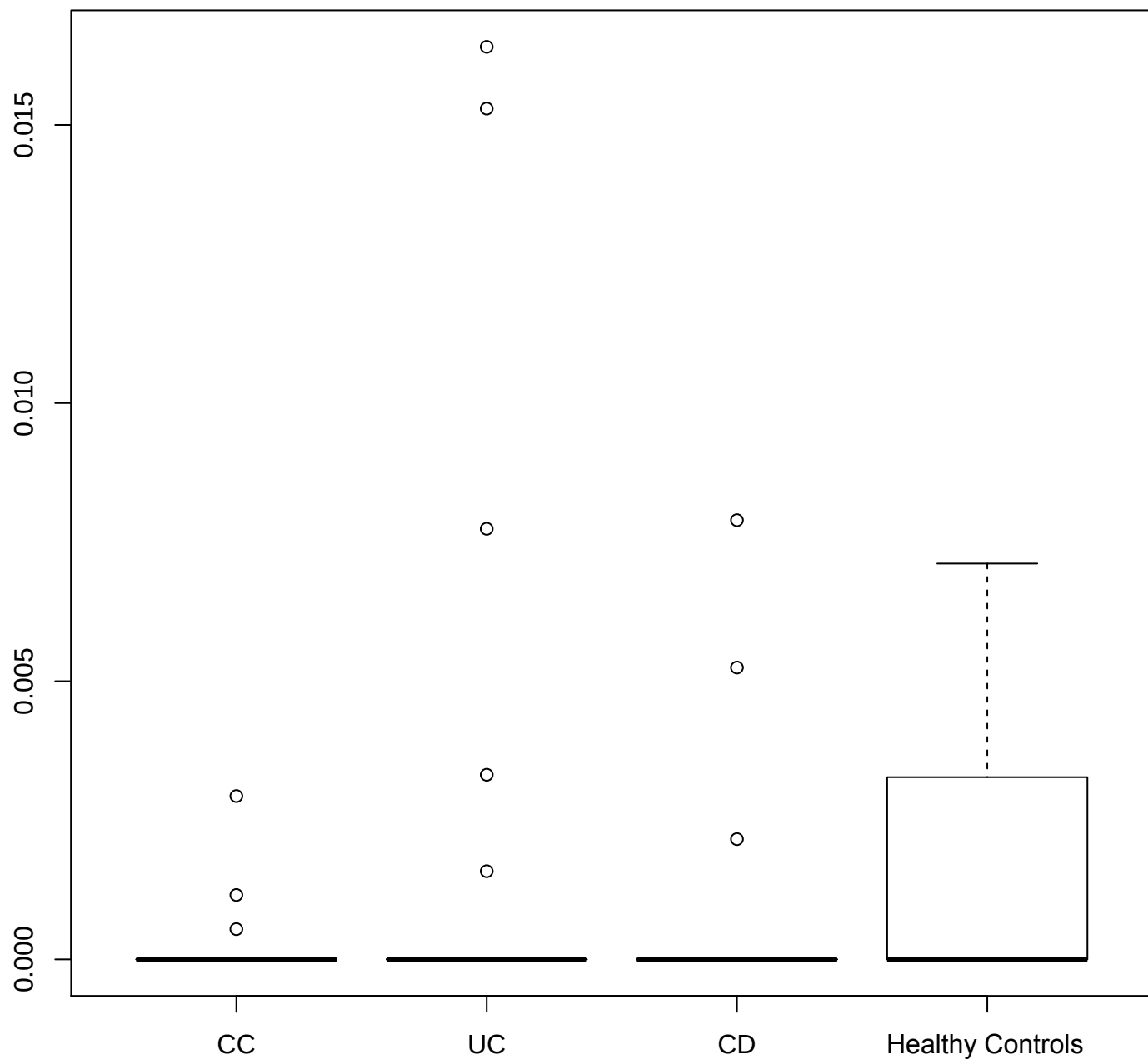
p=0.0003

unclassified_Coriobacteriaceae

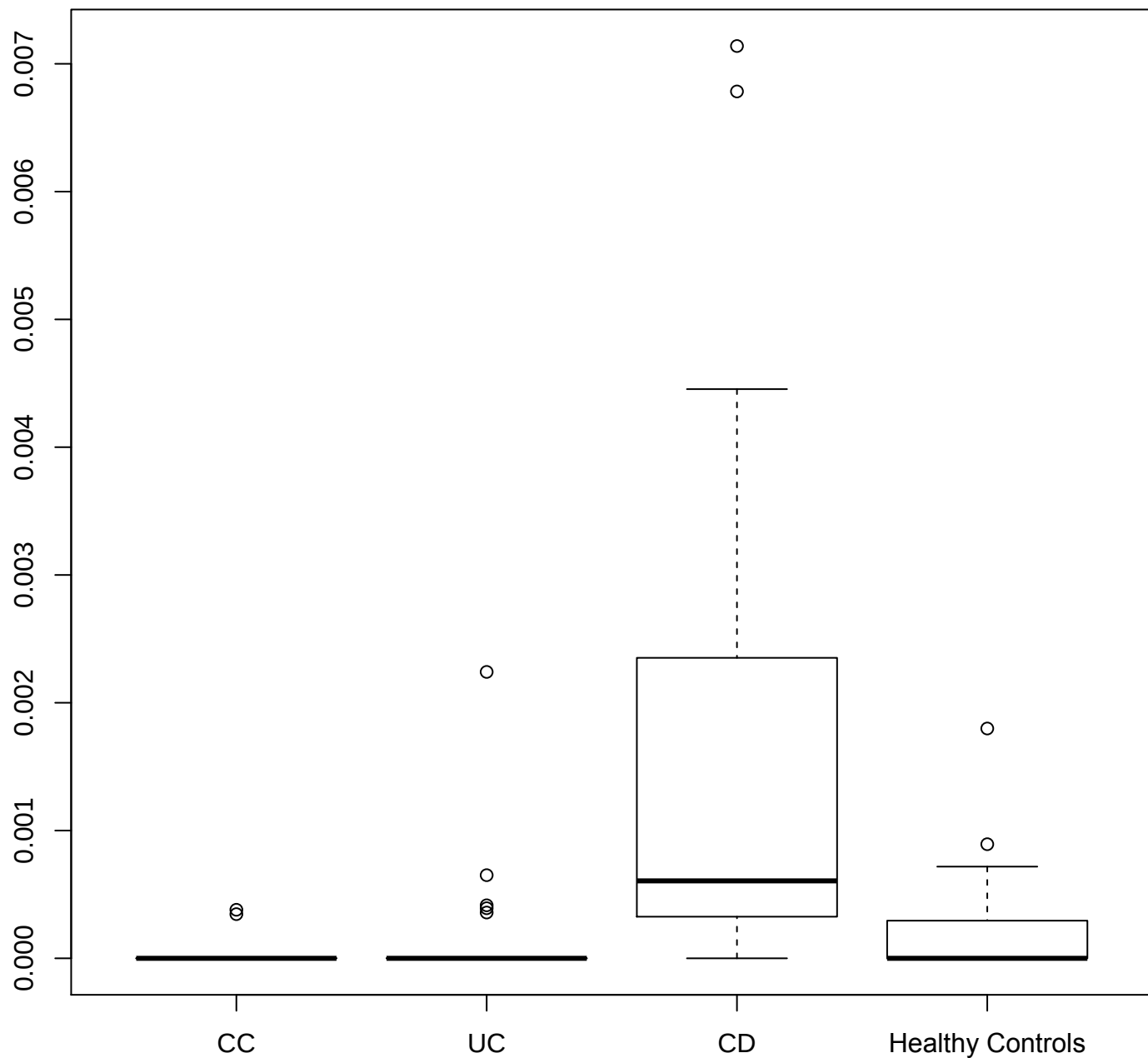


p=0.002

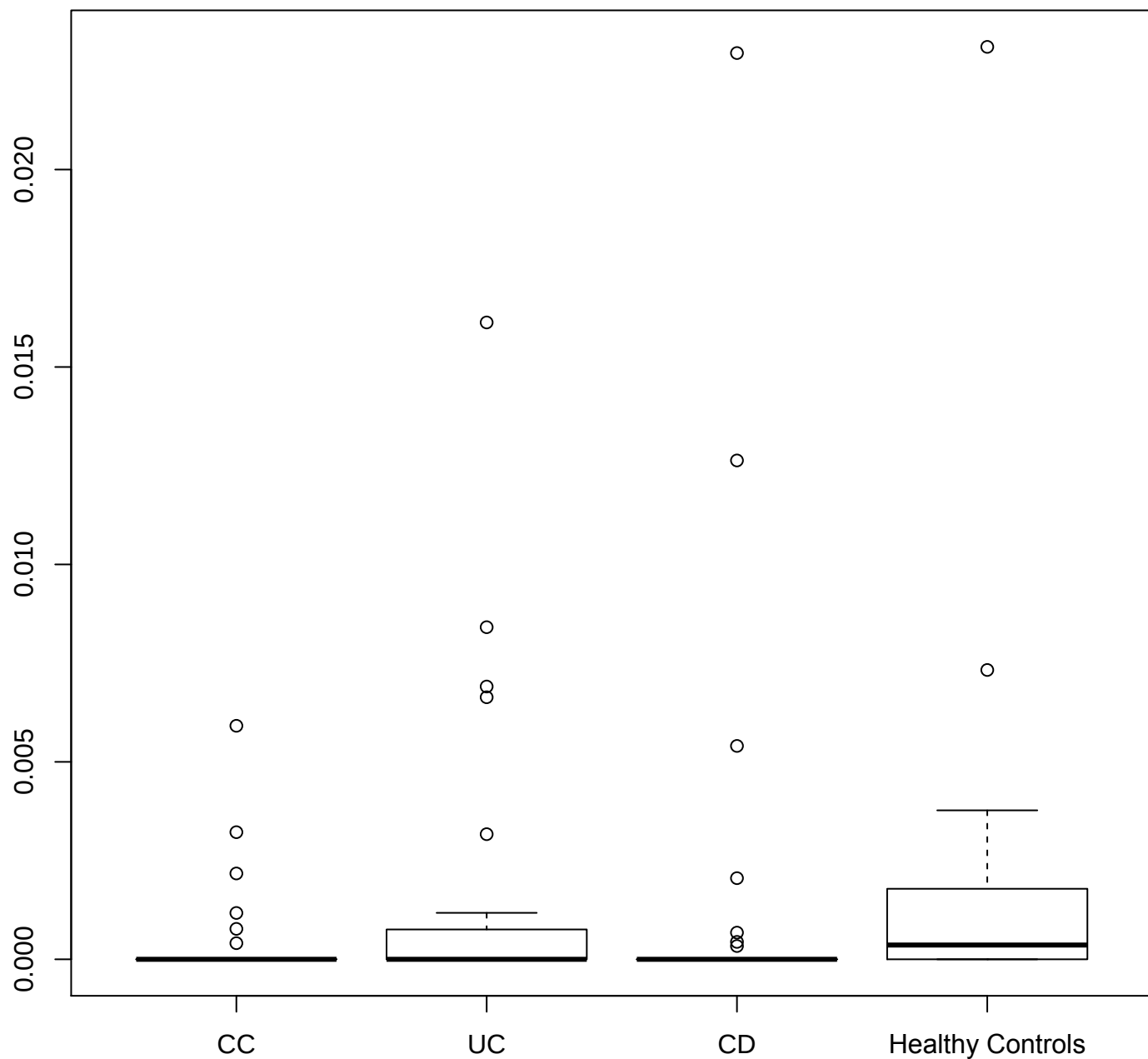
Desulfovibrio



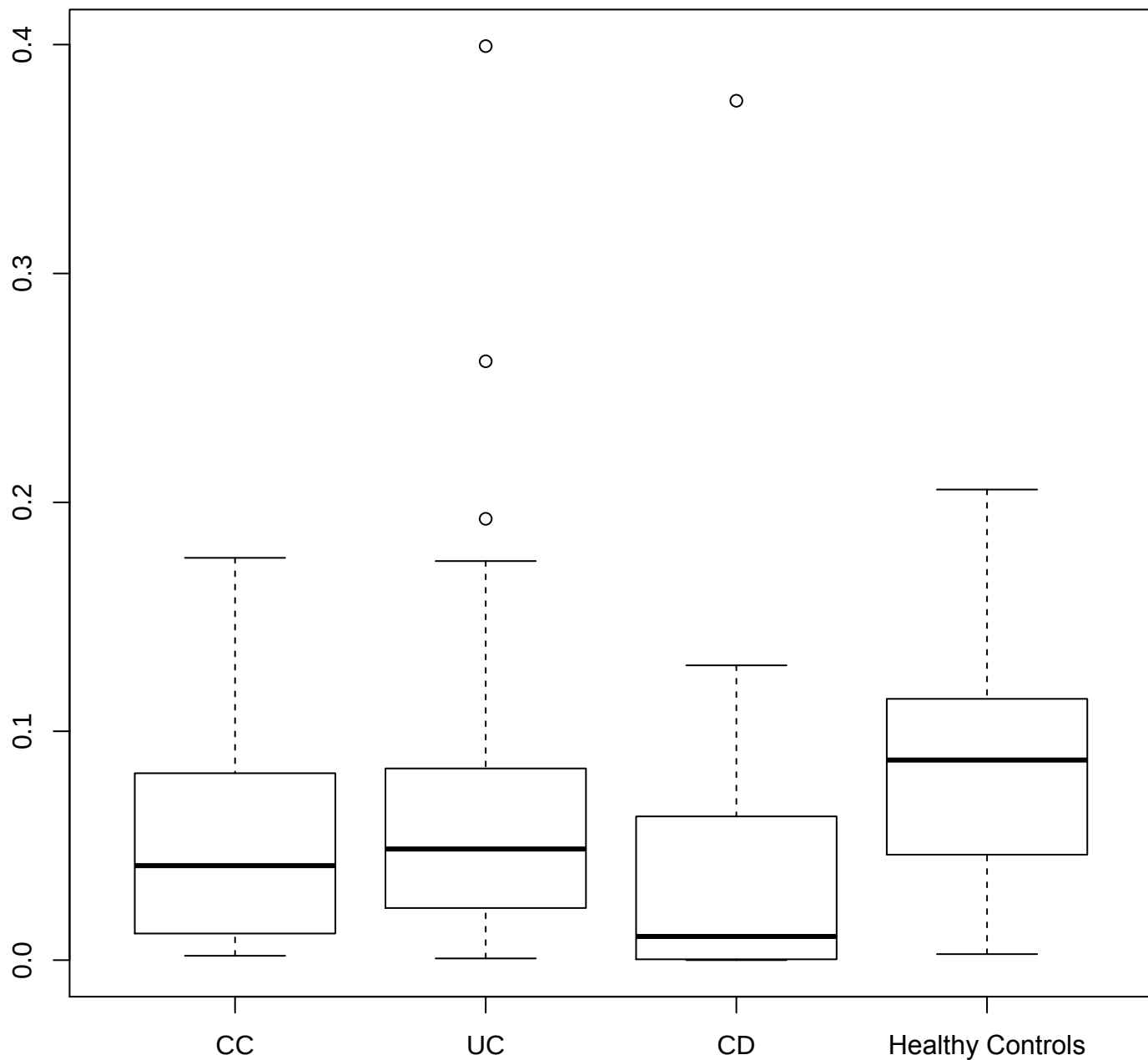
Halomonas



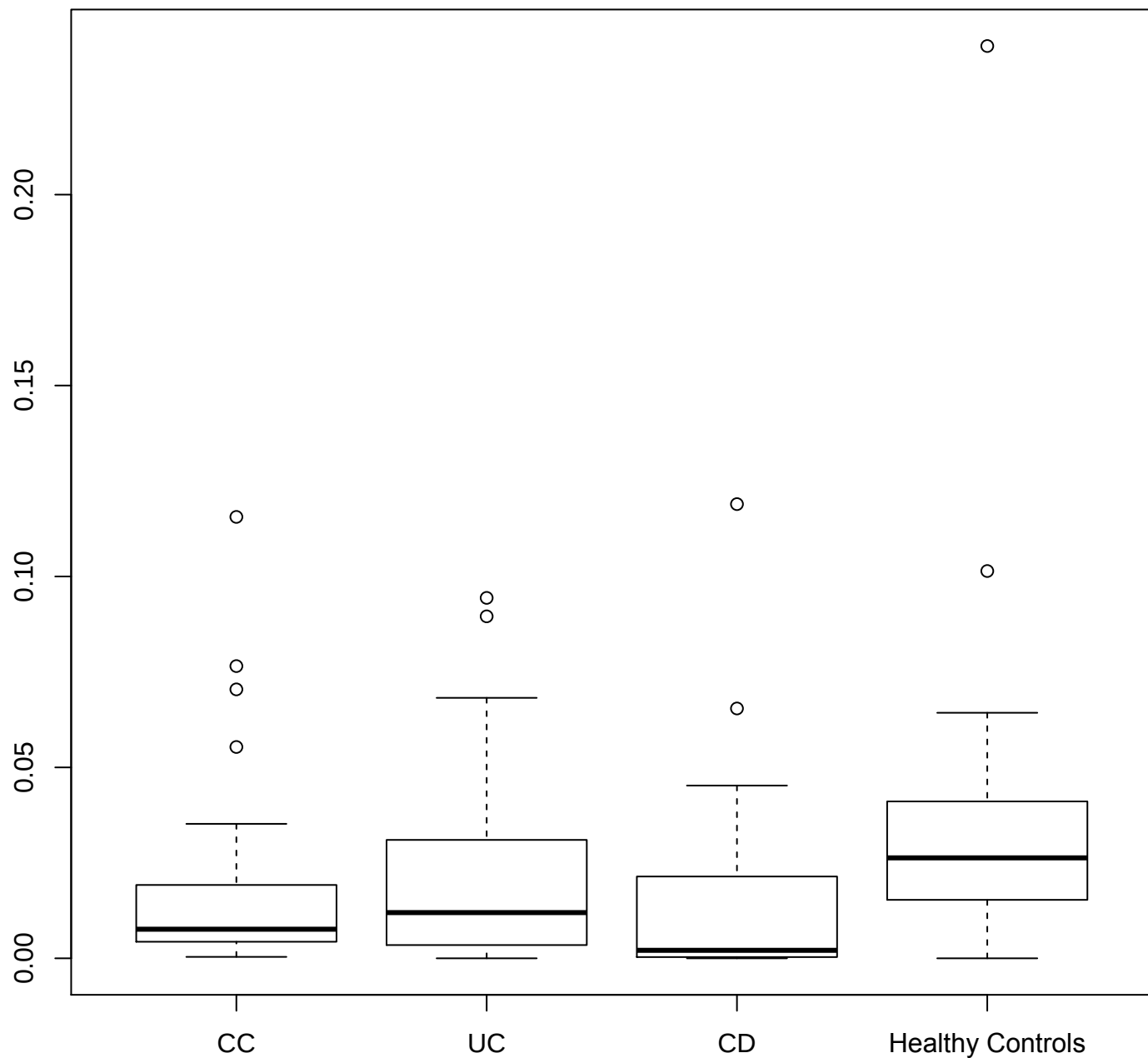
Acetivibrio



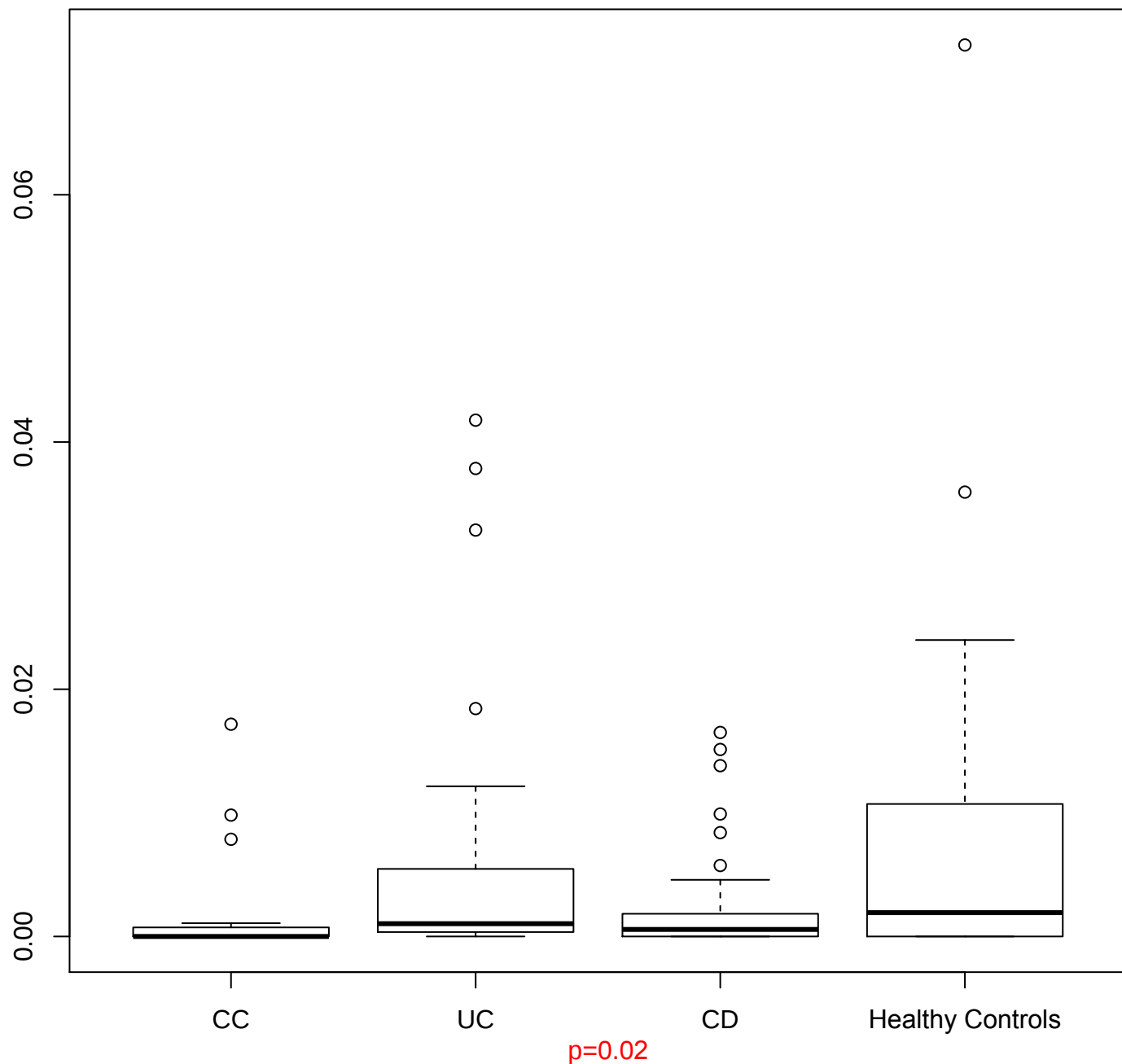
unclassified_Ruminococcaceae



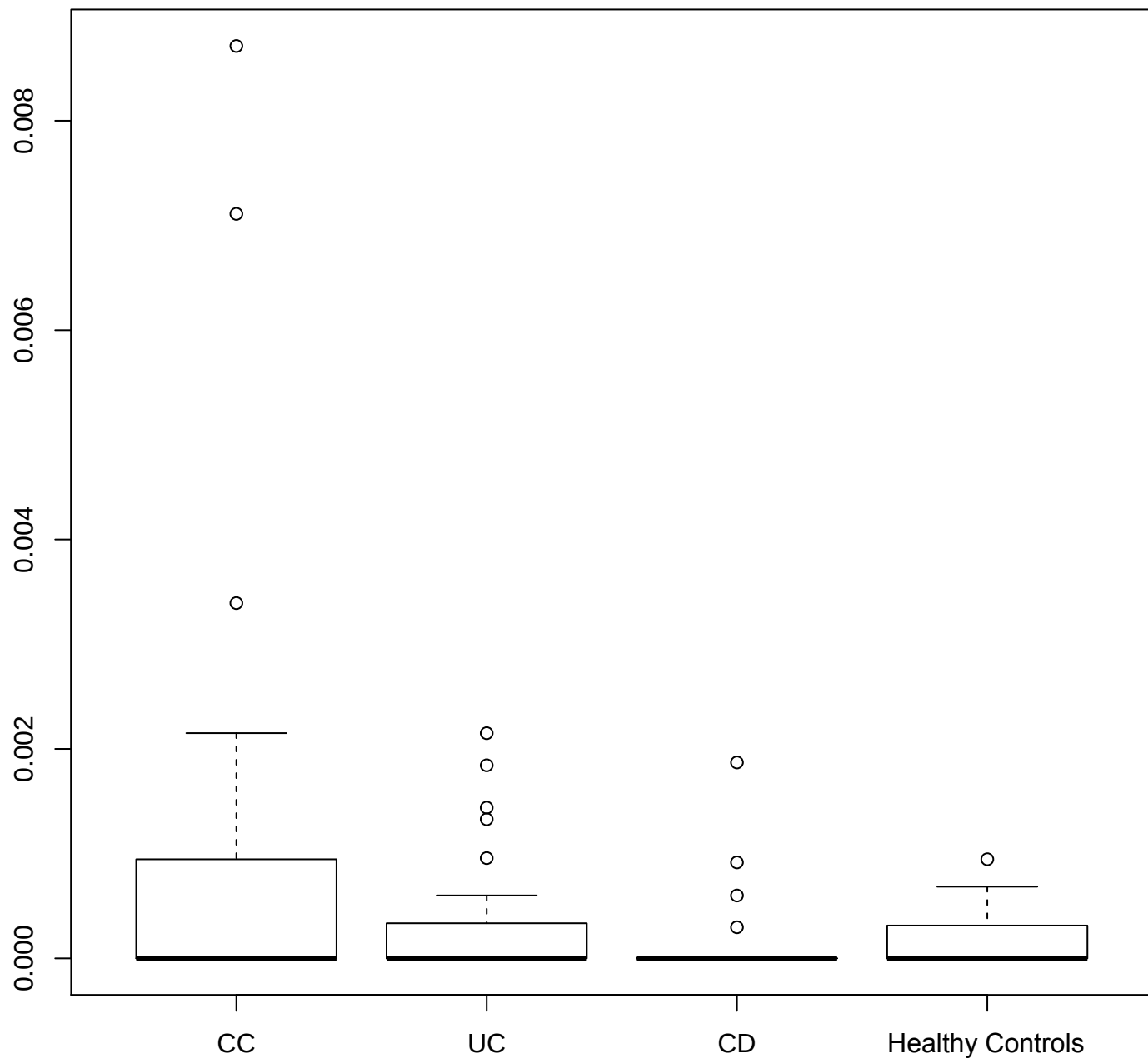
unclassified_Clostridiales



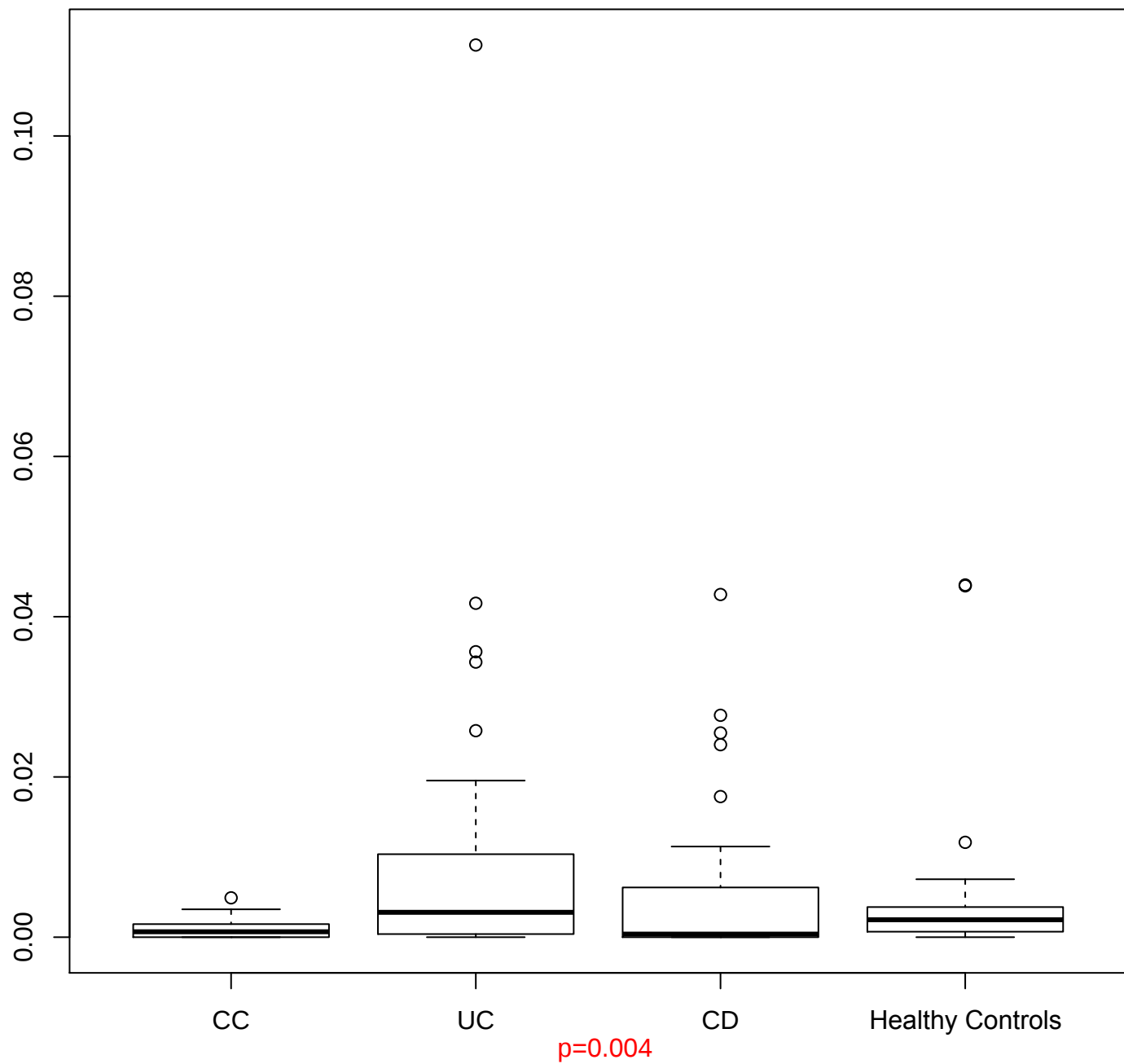
Erysipelotrichaceae_incertae_sedis



Turcibacter



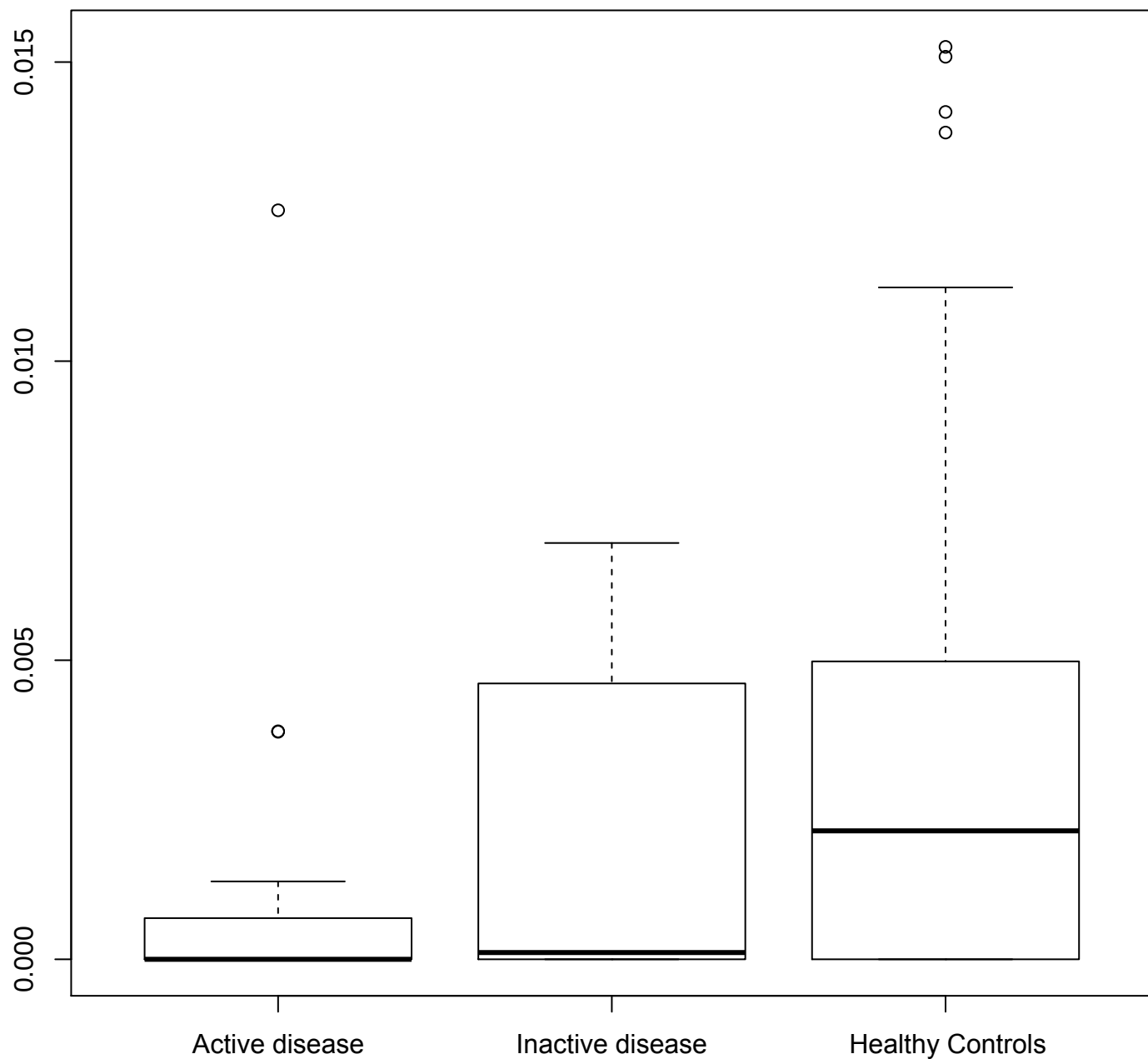
unclassified_Erysipelotrichaceae



Supplemental figures 4

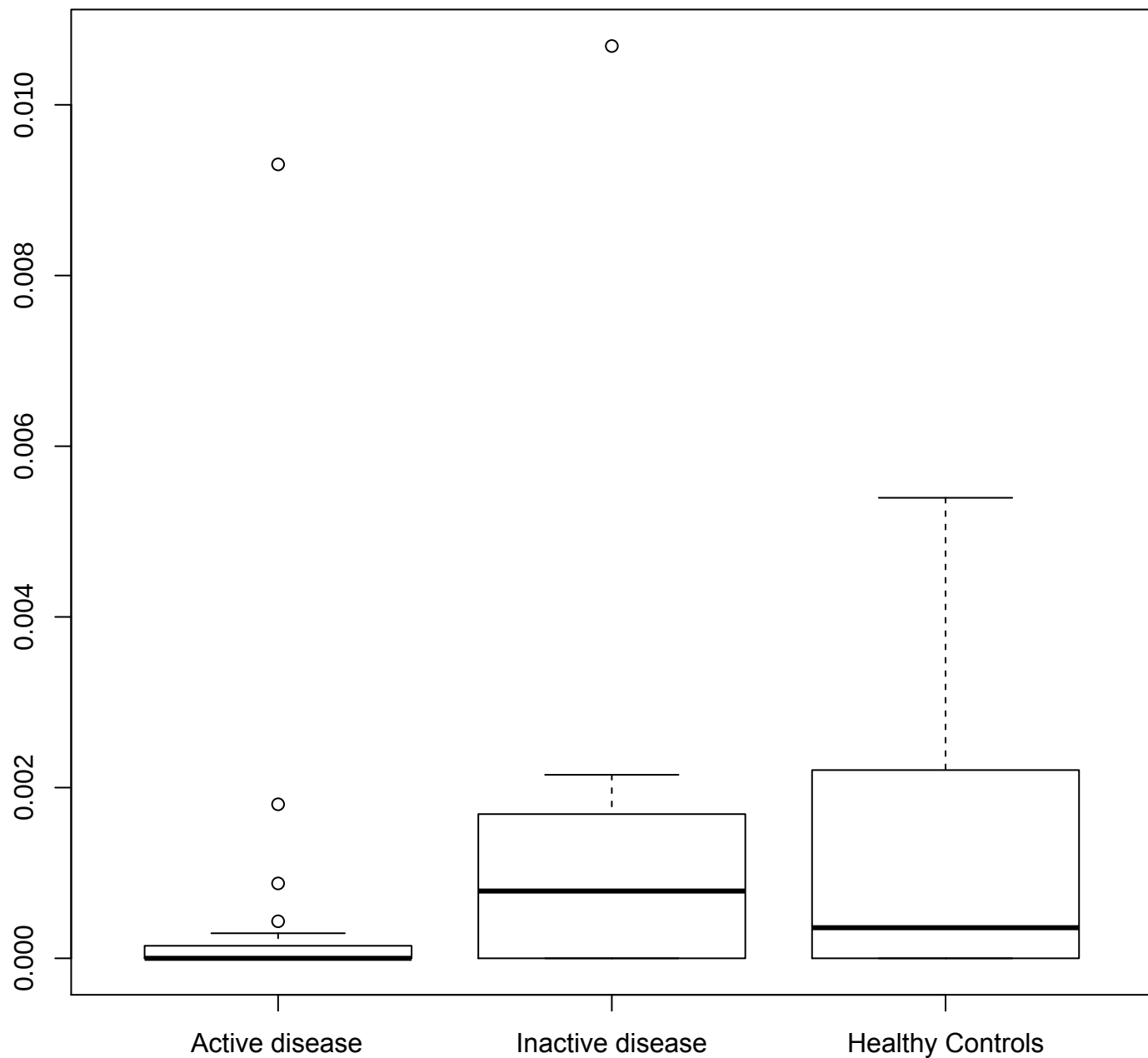
Relative abundance of OTUs within the Ruminococcaceae family that were reduced in active collagenous colitis compared to inactive collagenous colitis and healthy controls. (Comparisons were based on Kruskal-Wallis test)

unclassified_Ruminococcaceae_59



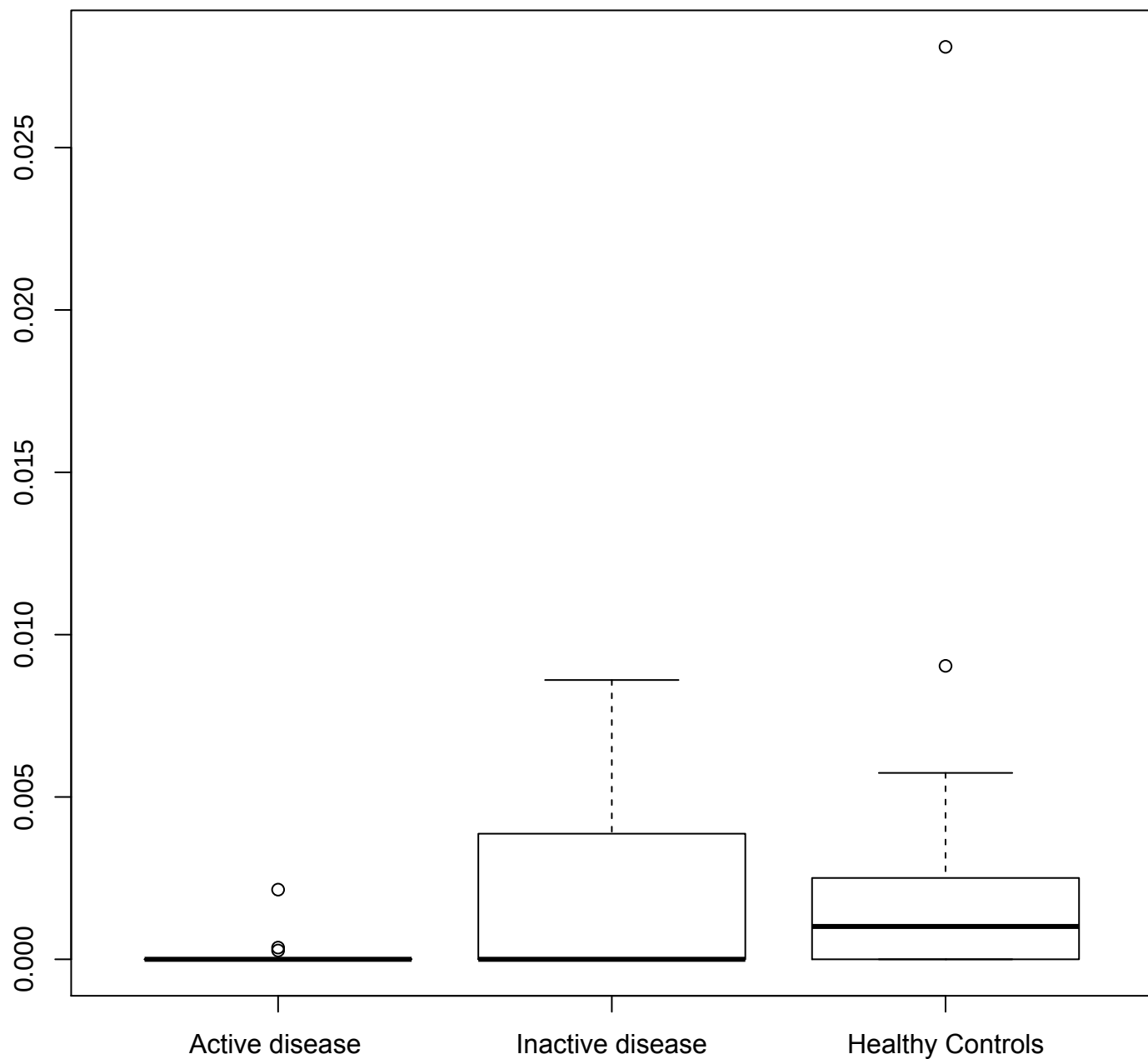
p=0.046

unclassified_Ruminococcaceae_60



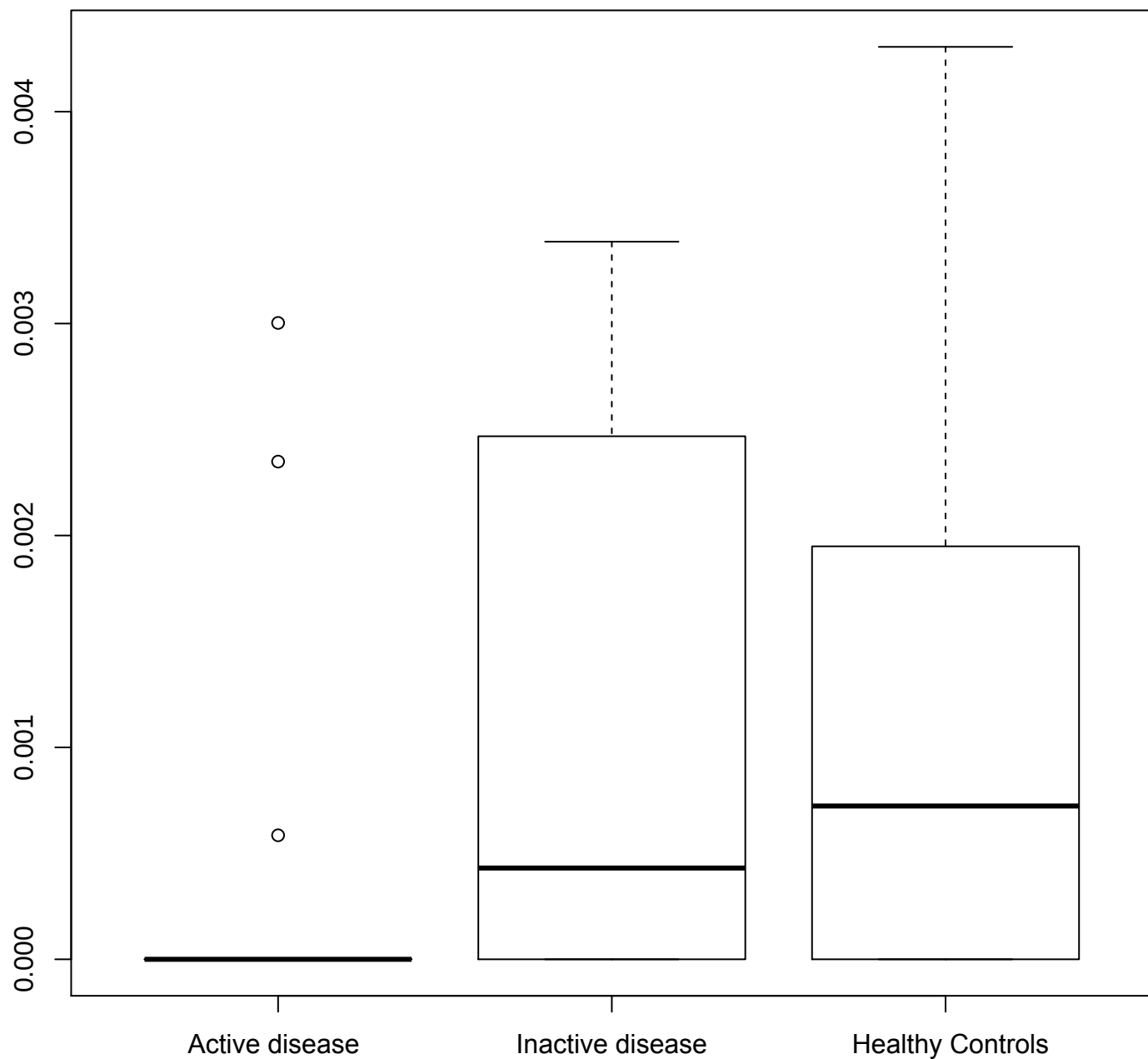
$p=0.030$

unclassified_Ruminococcaceae_74



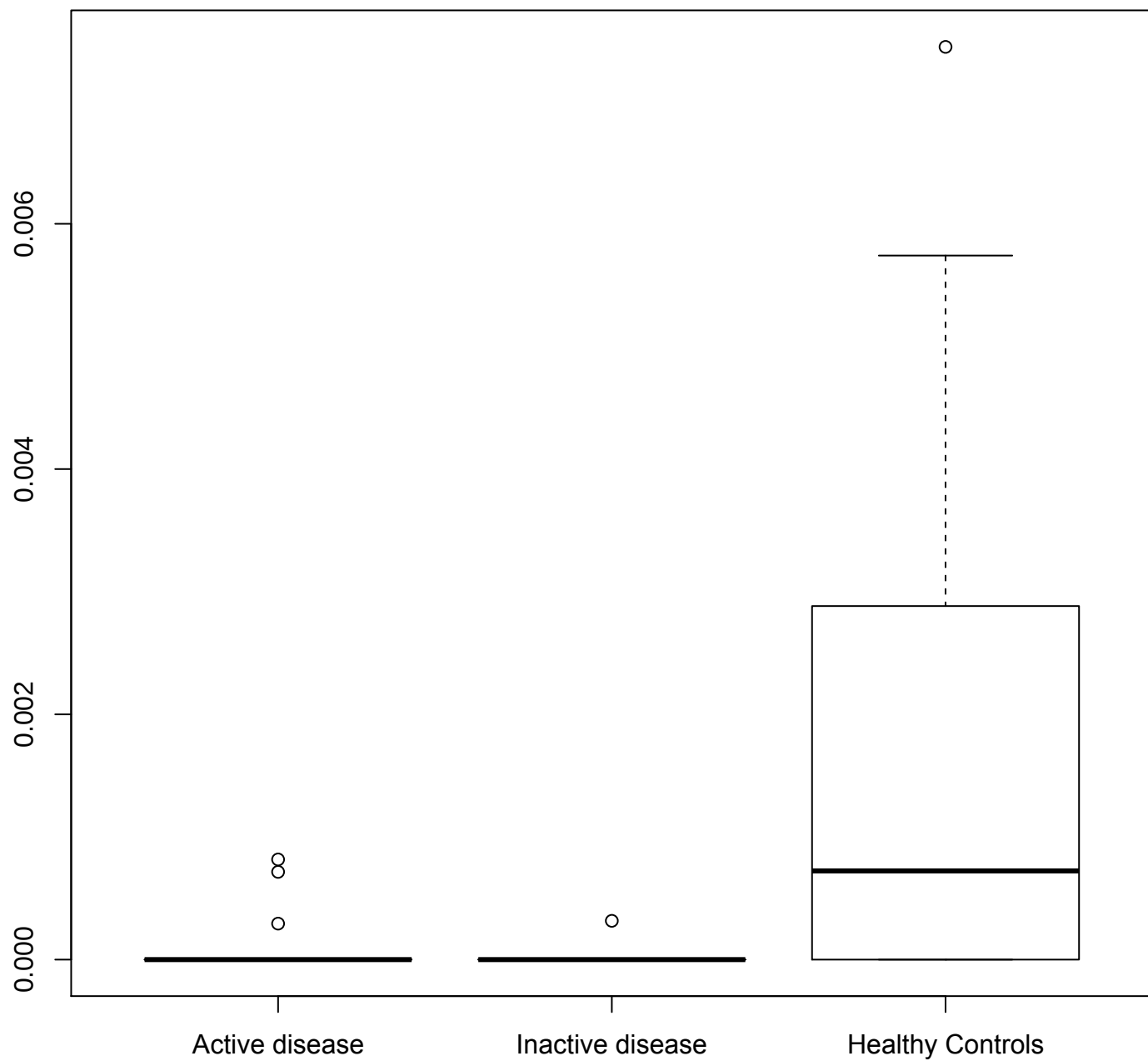
p=0.0006

unclassified_Ruminococcaceae_98



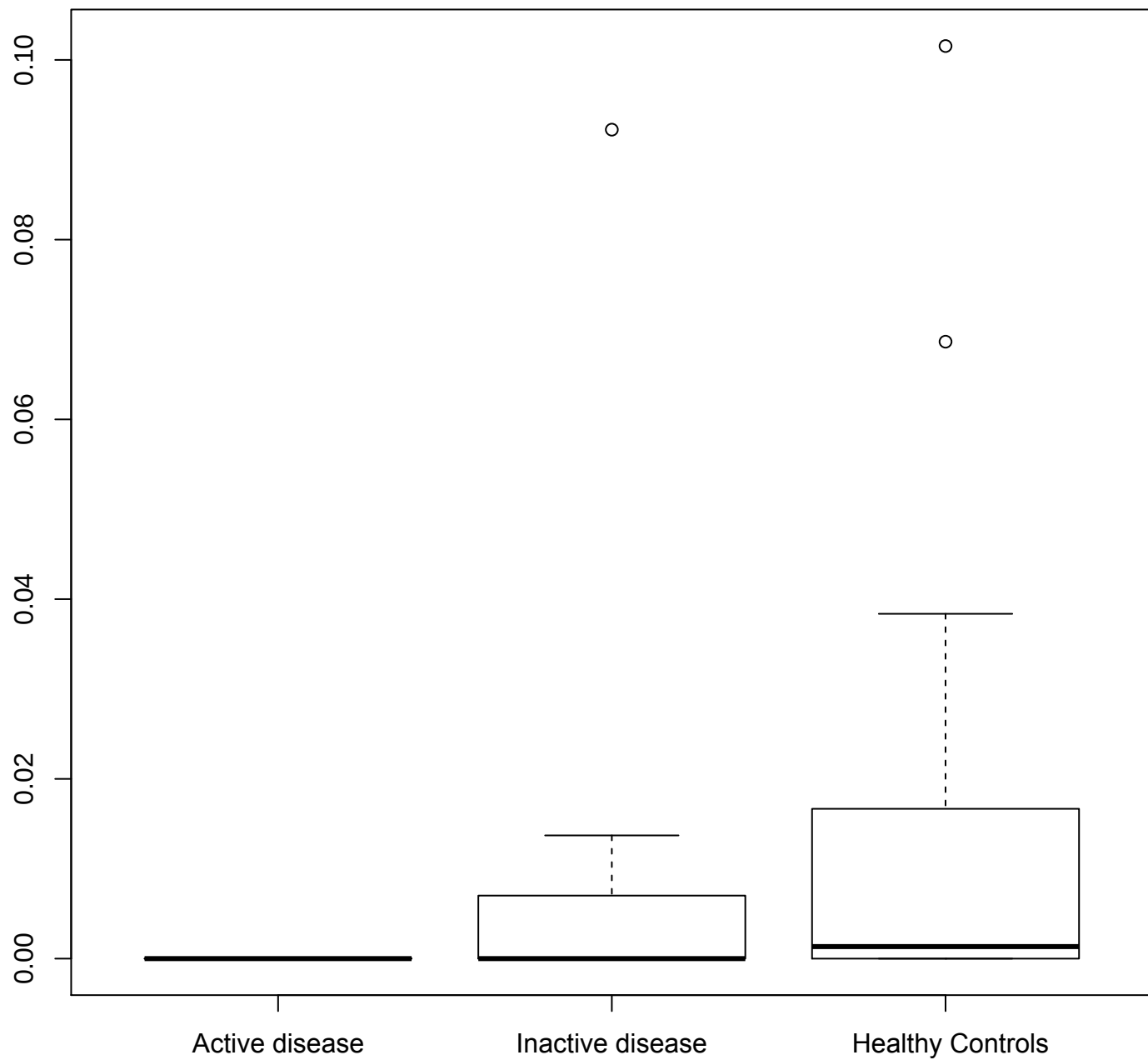
p=0.031

unclassified_Ruminococcaceae_105



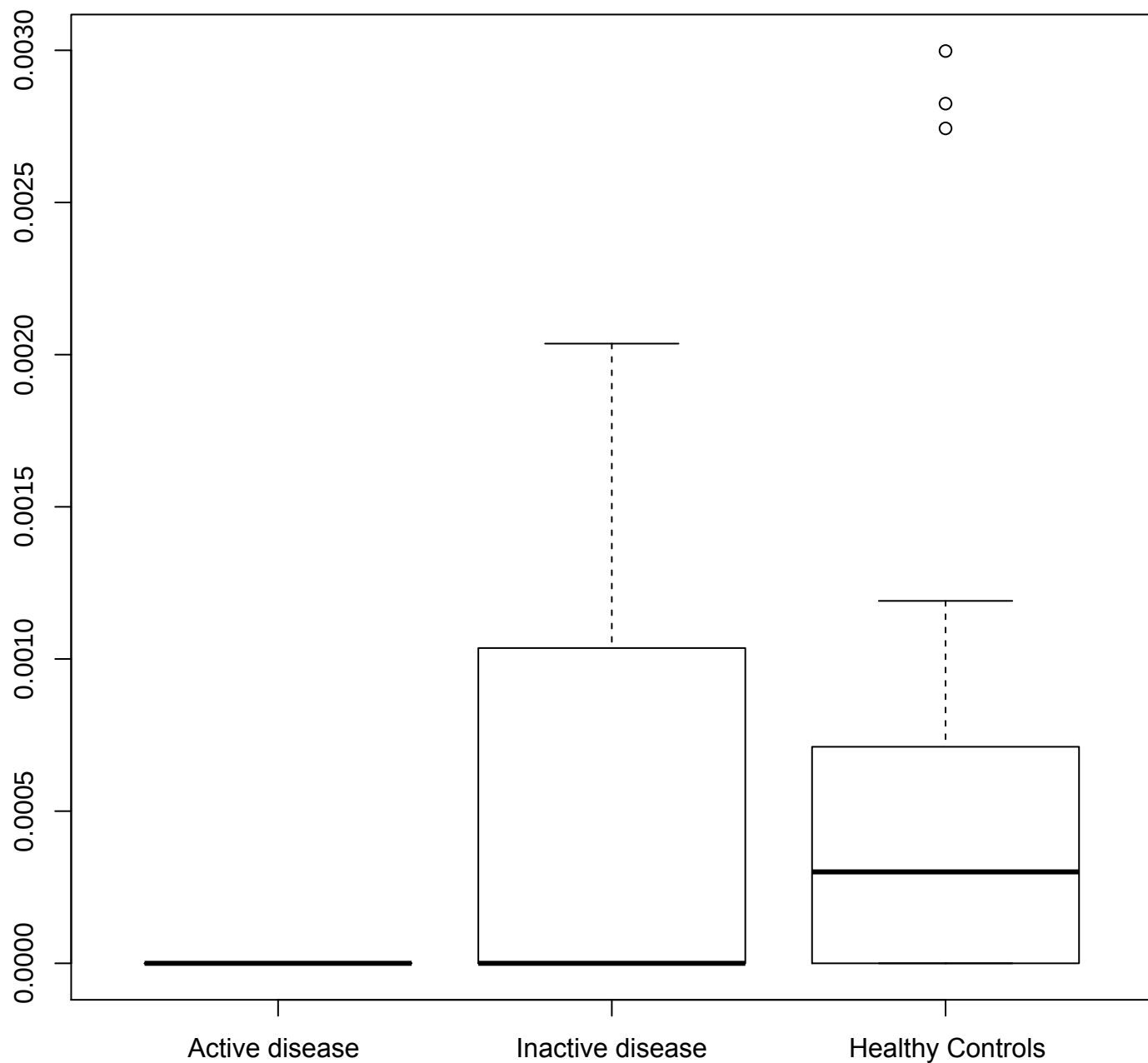
p=0.0004

unclassified_Ruminococcaceae_121



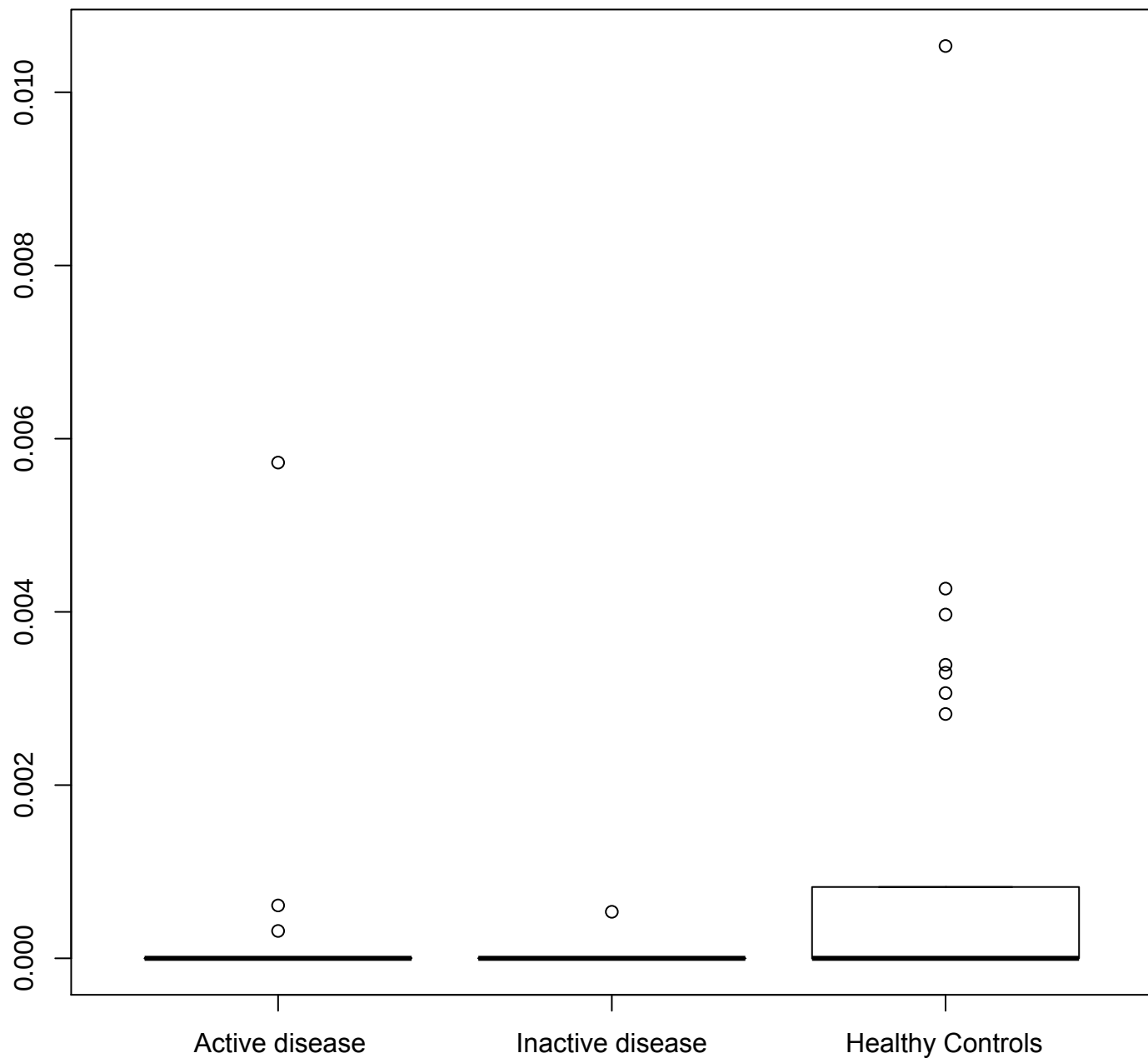
p=0.0003

unclassified_Ruminococcaceae_147



p=0.002

unclassified_Ruminococcaceae_159

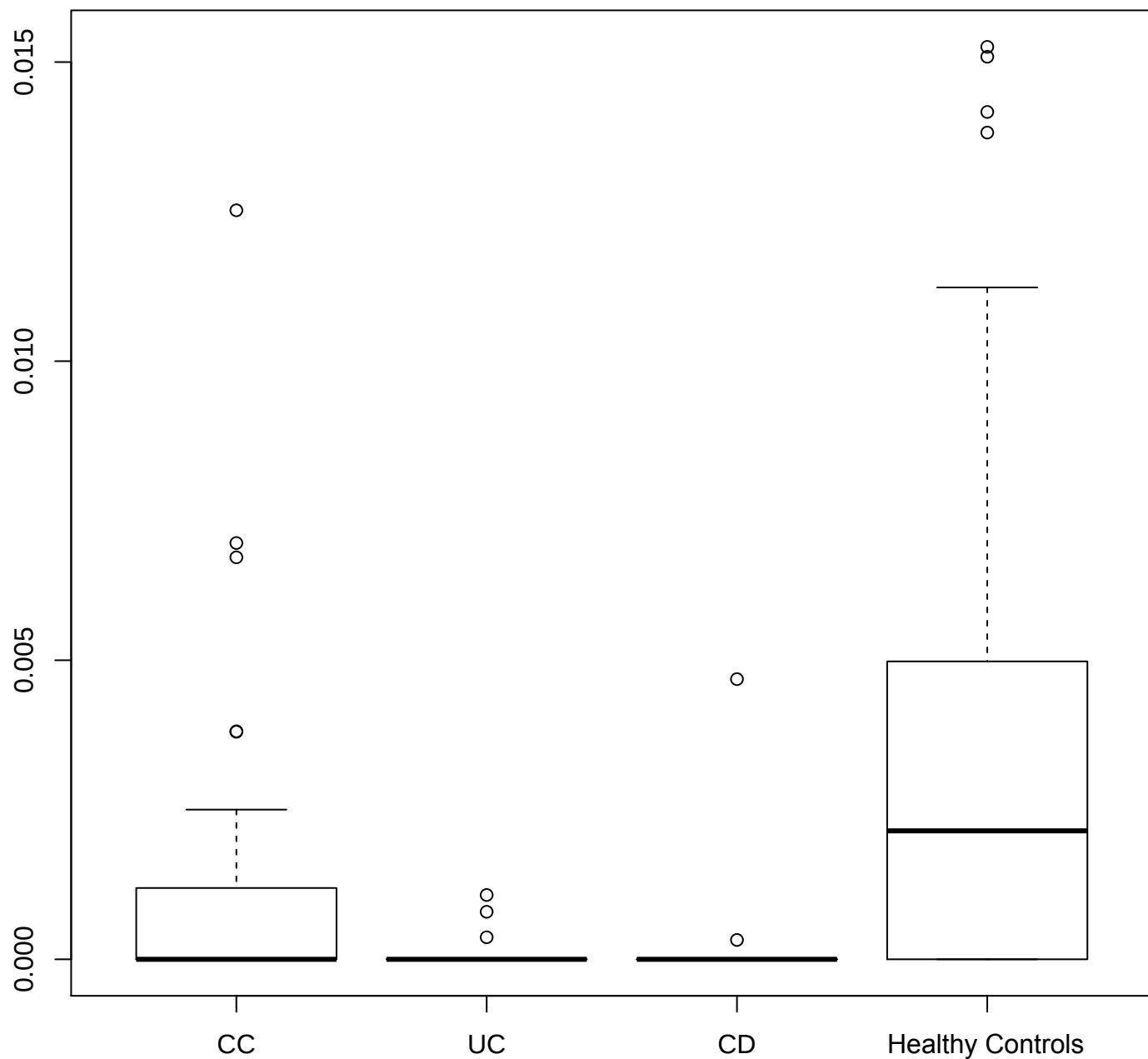


p=0.040

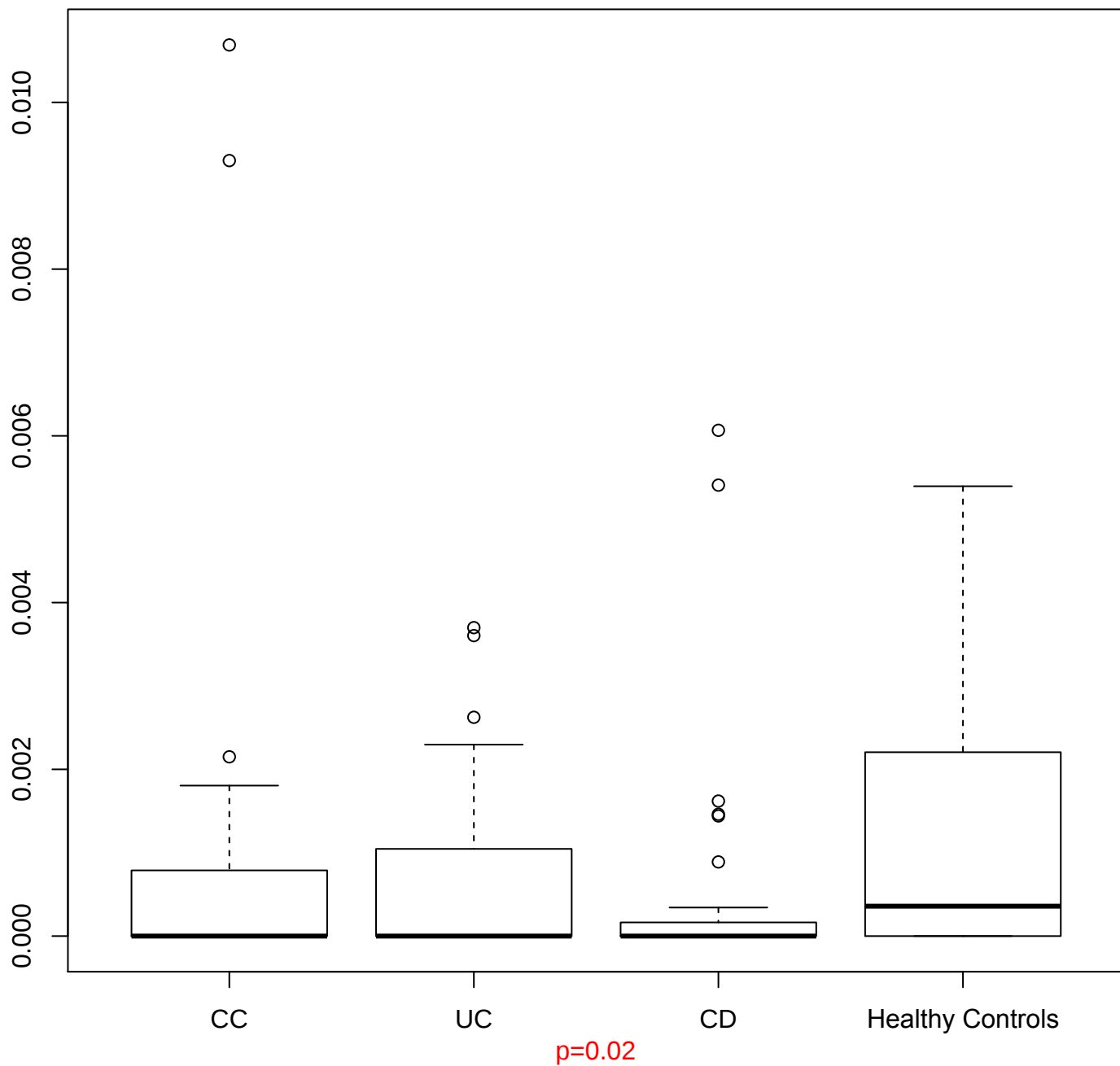
Suppl figures 5

Relative abundance of OTUs belonging to the Ruminococcaceae family in collagenous colitis that showed similar patterns in Crohn's disease and ulcerative colitis. (Comparisons were based on Kruskal-Wallis test).

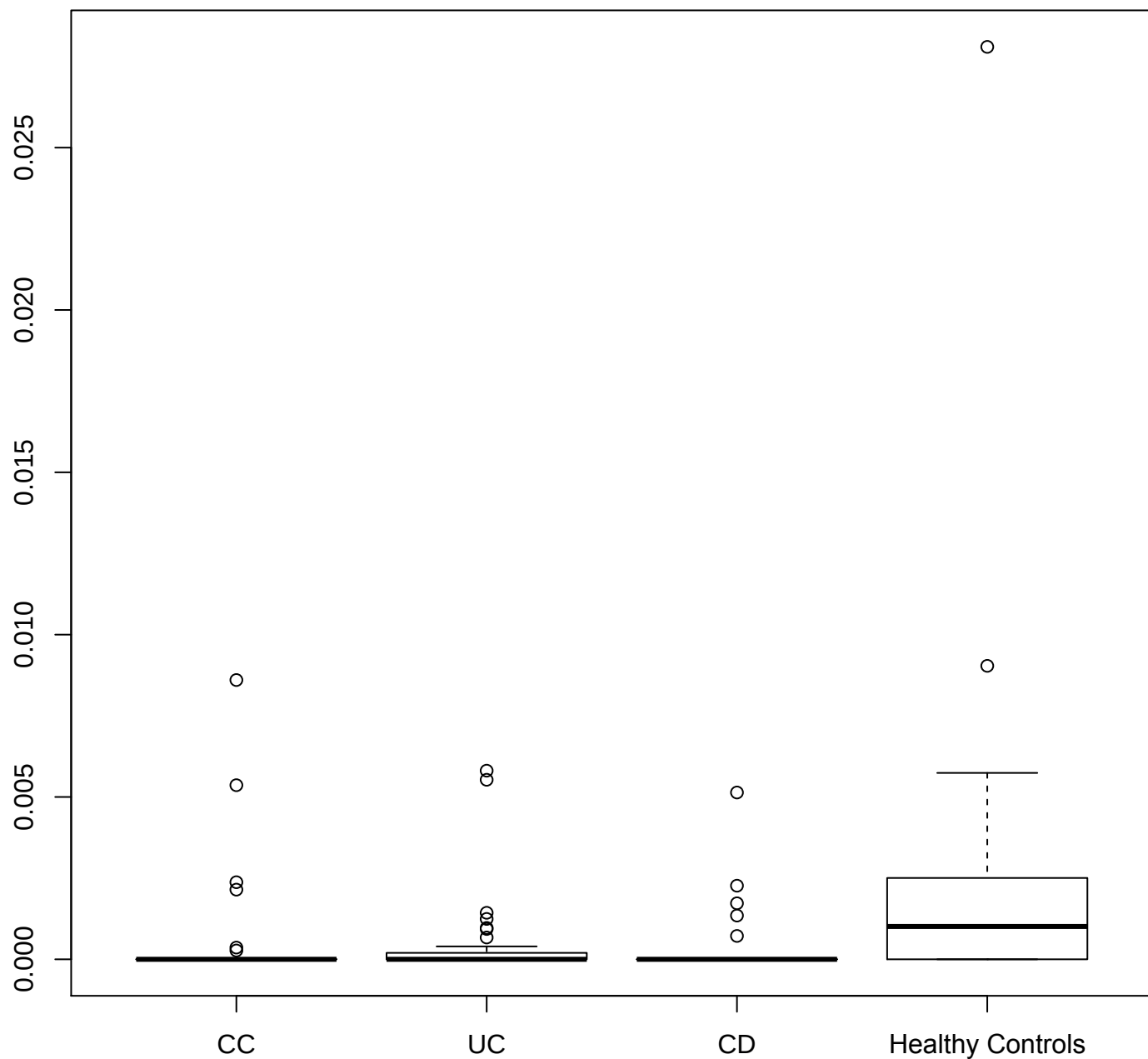
unclassified_Ruminococcaceae_59



unclassified_Ruminococcaceae_60

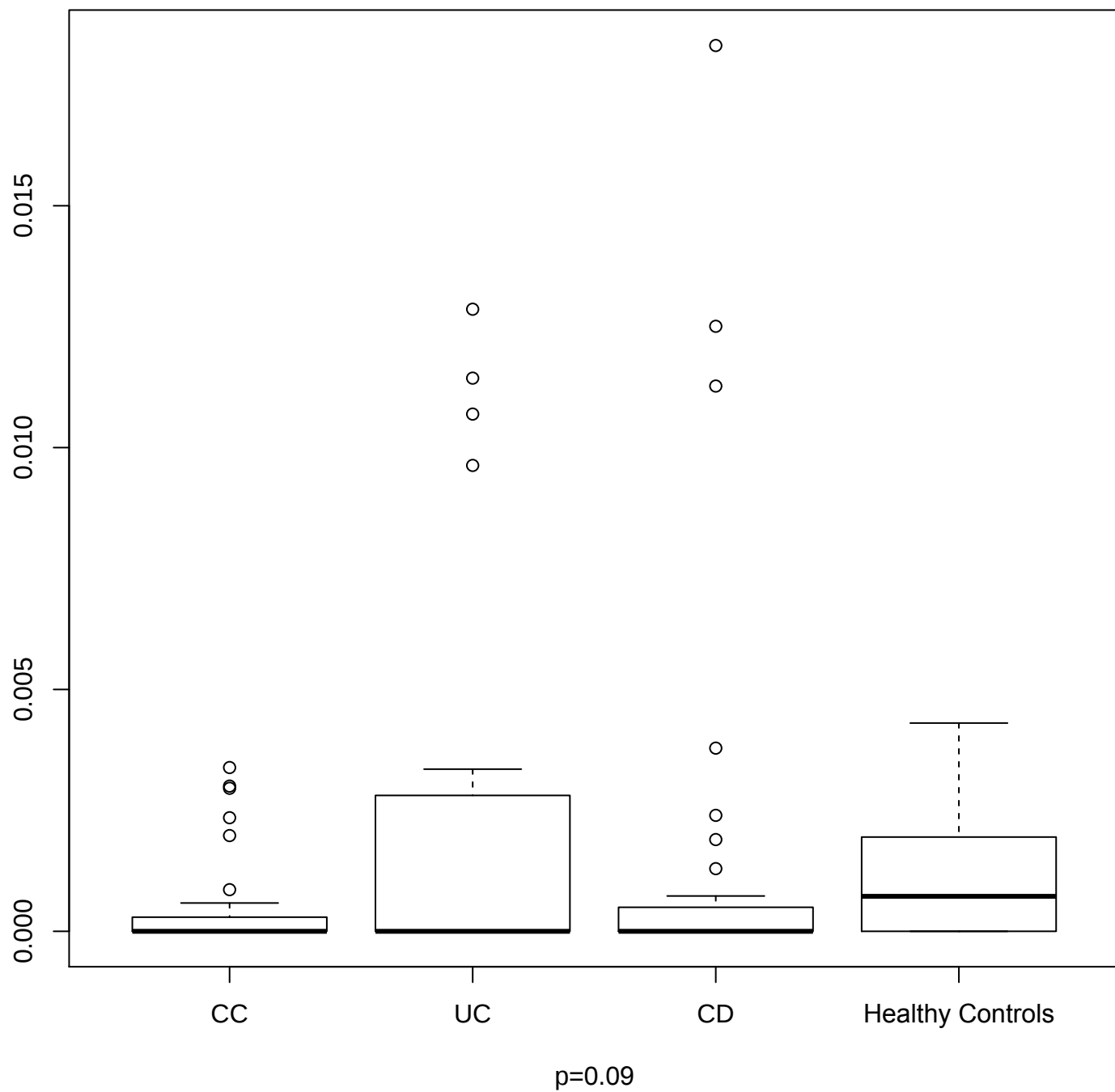


unclassified_Ruminococcaceae_74

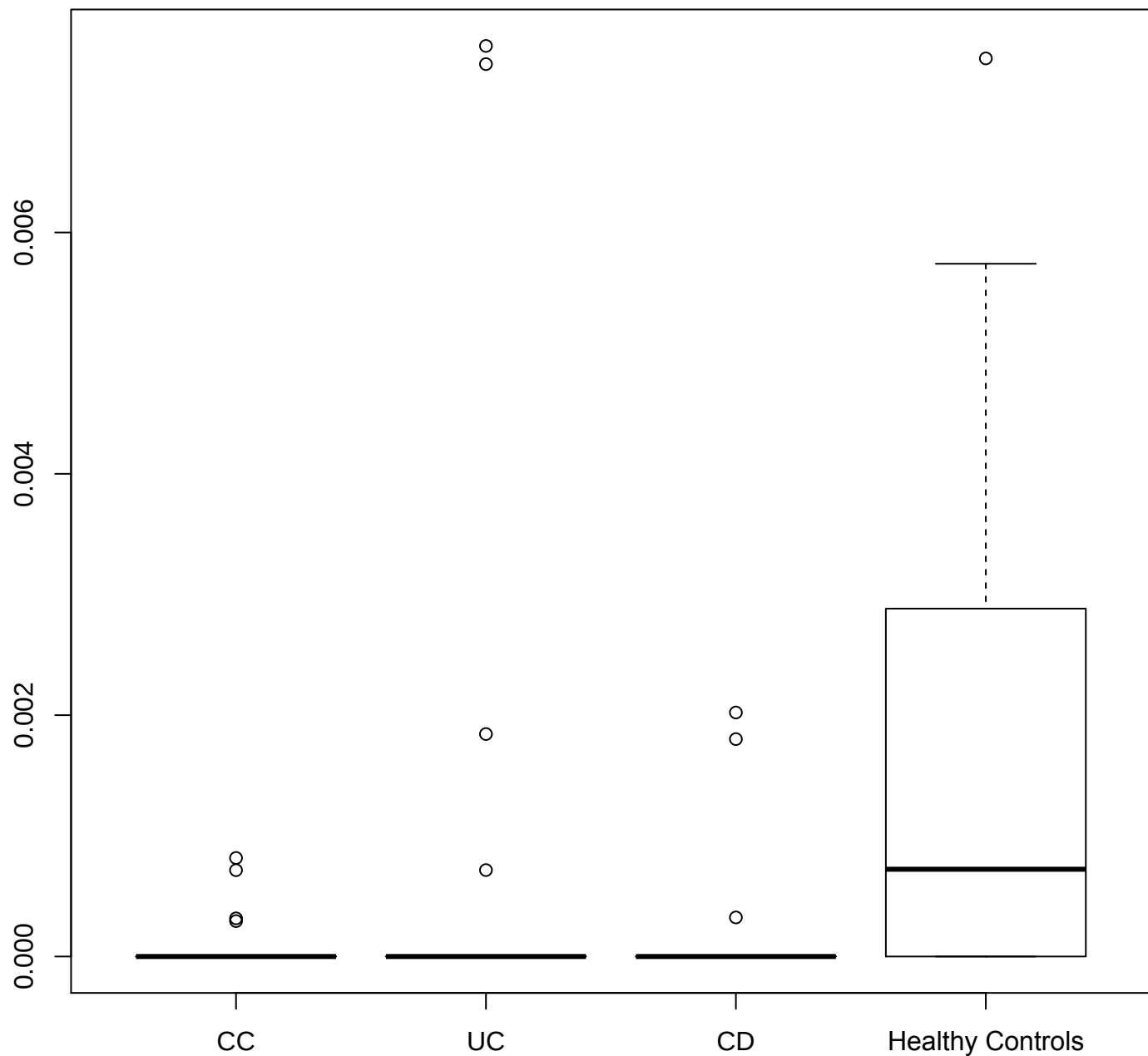


P<0.0001

unclassified_Ruminococcaceae_98

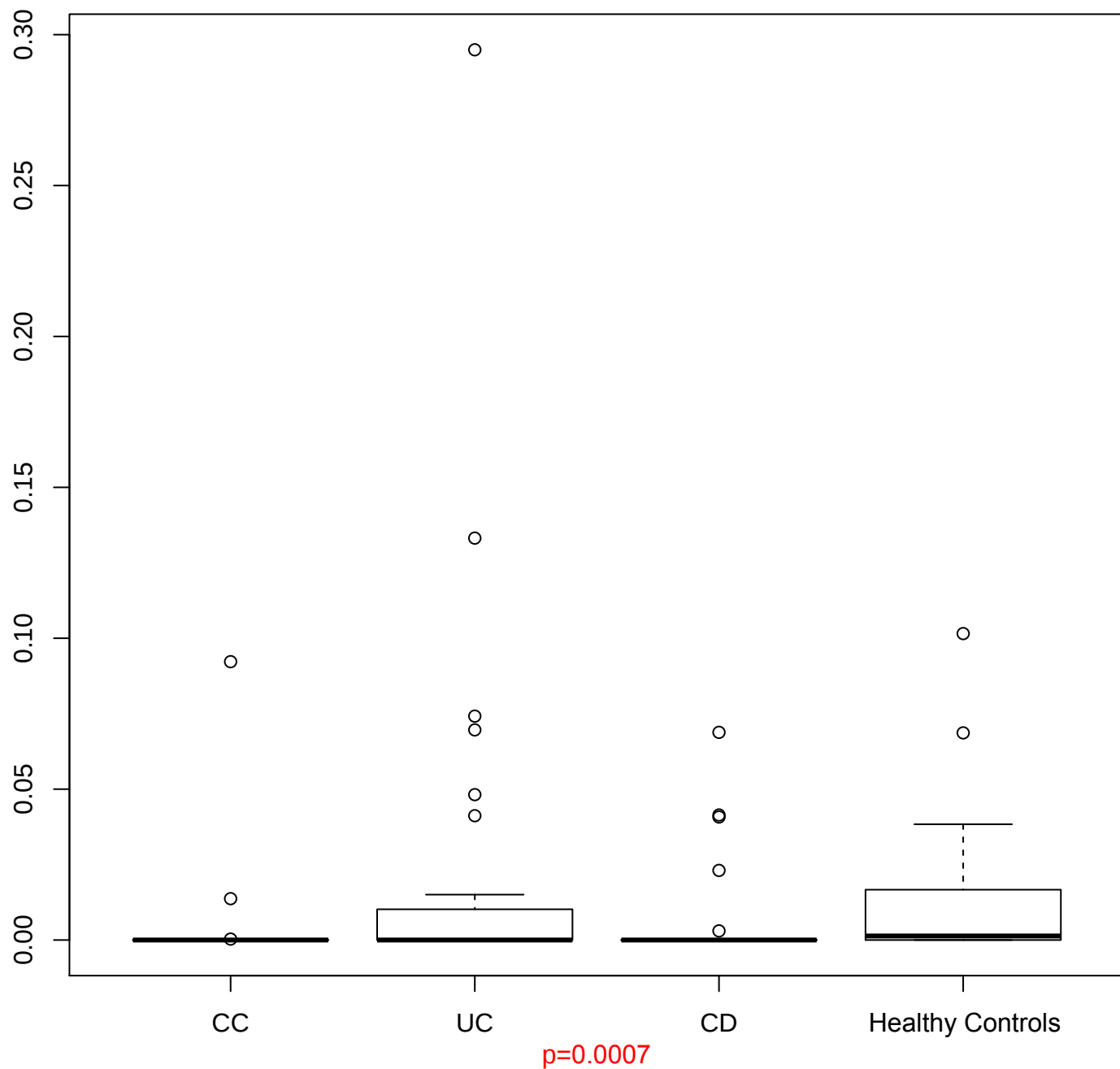


unclassified_Ruminococcaceae_105

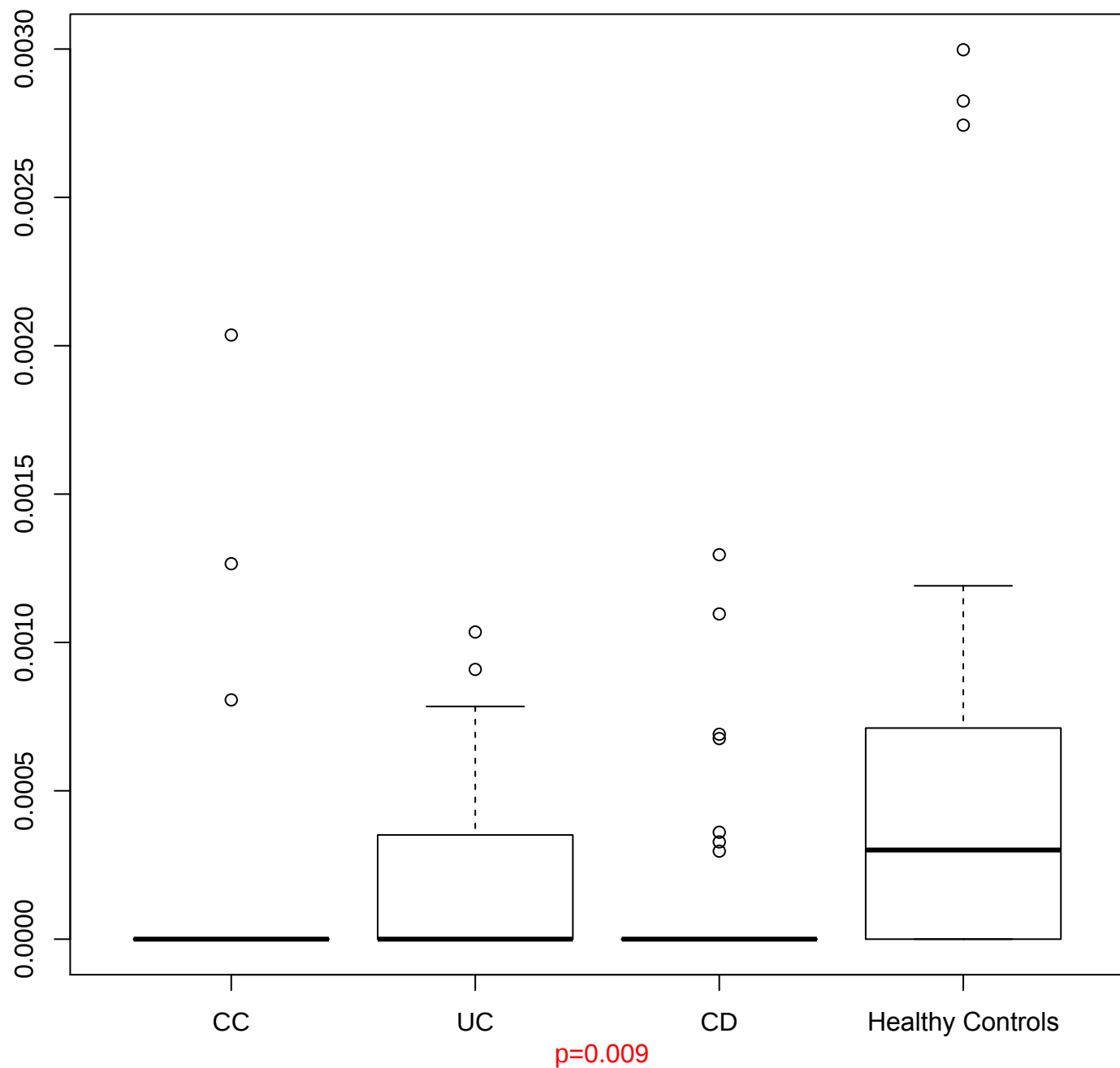


$p < 0.0001$

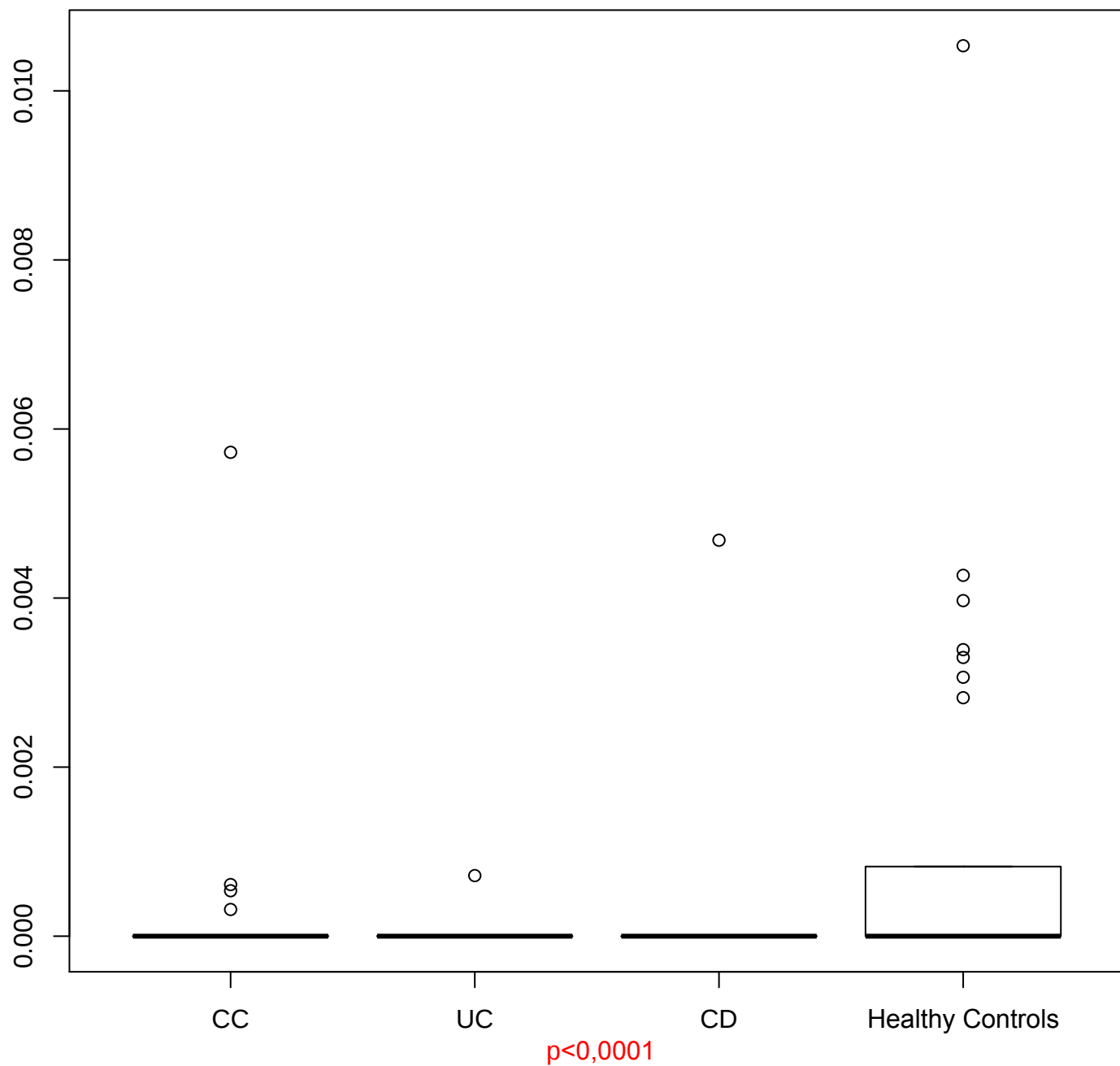
unclassified_Ruminococcaceae_121



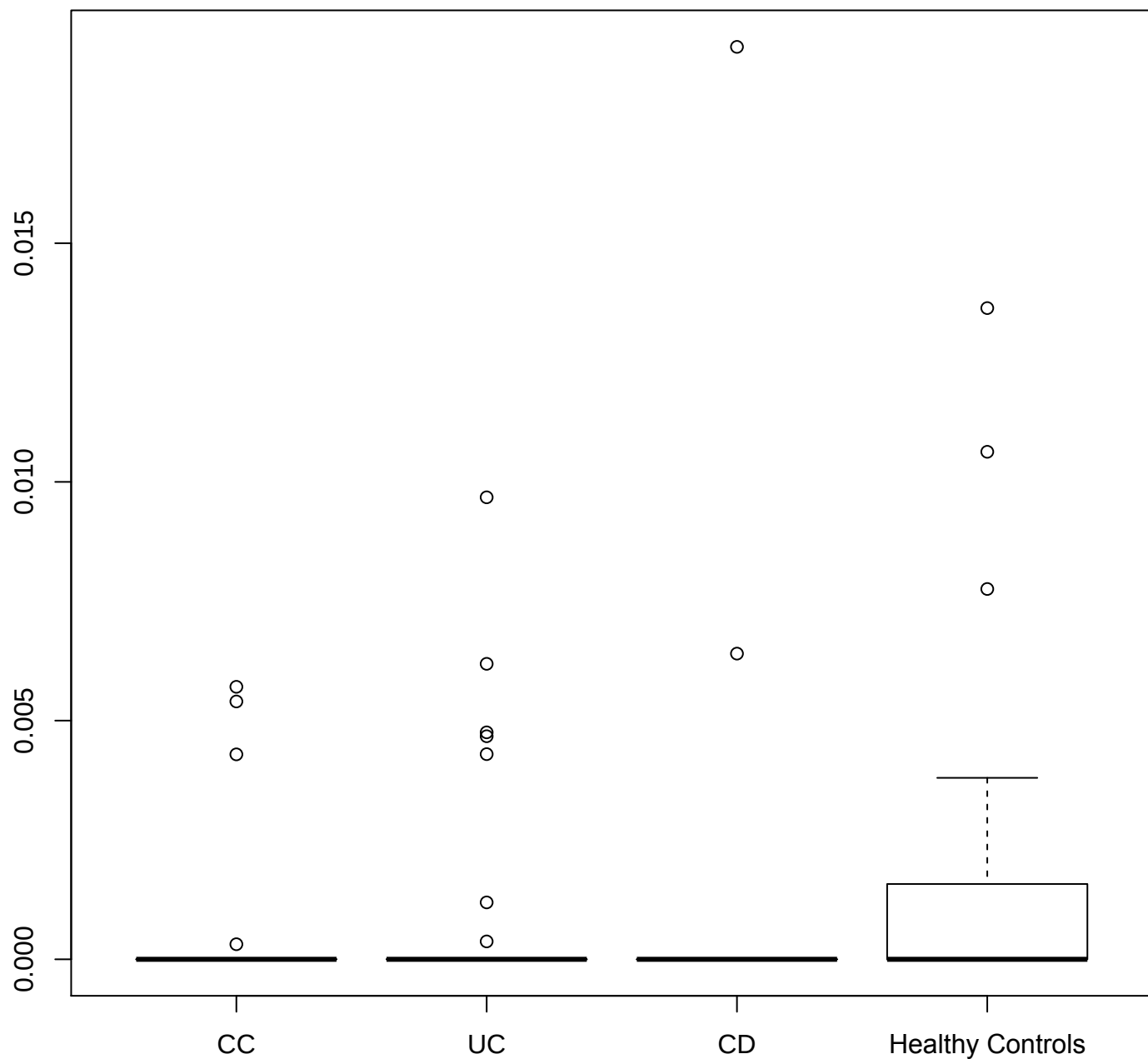
unclassified_Ruminococcaceae_147



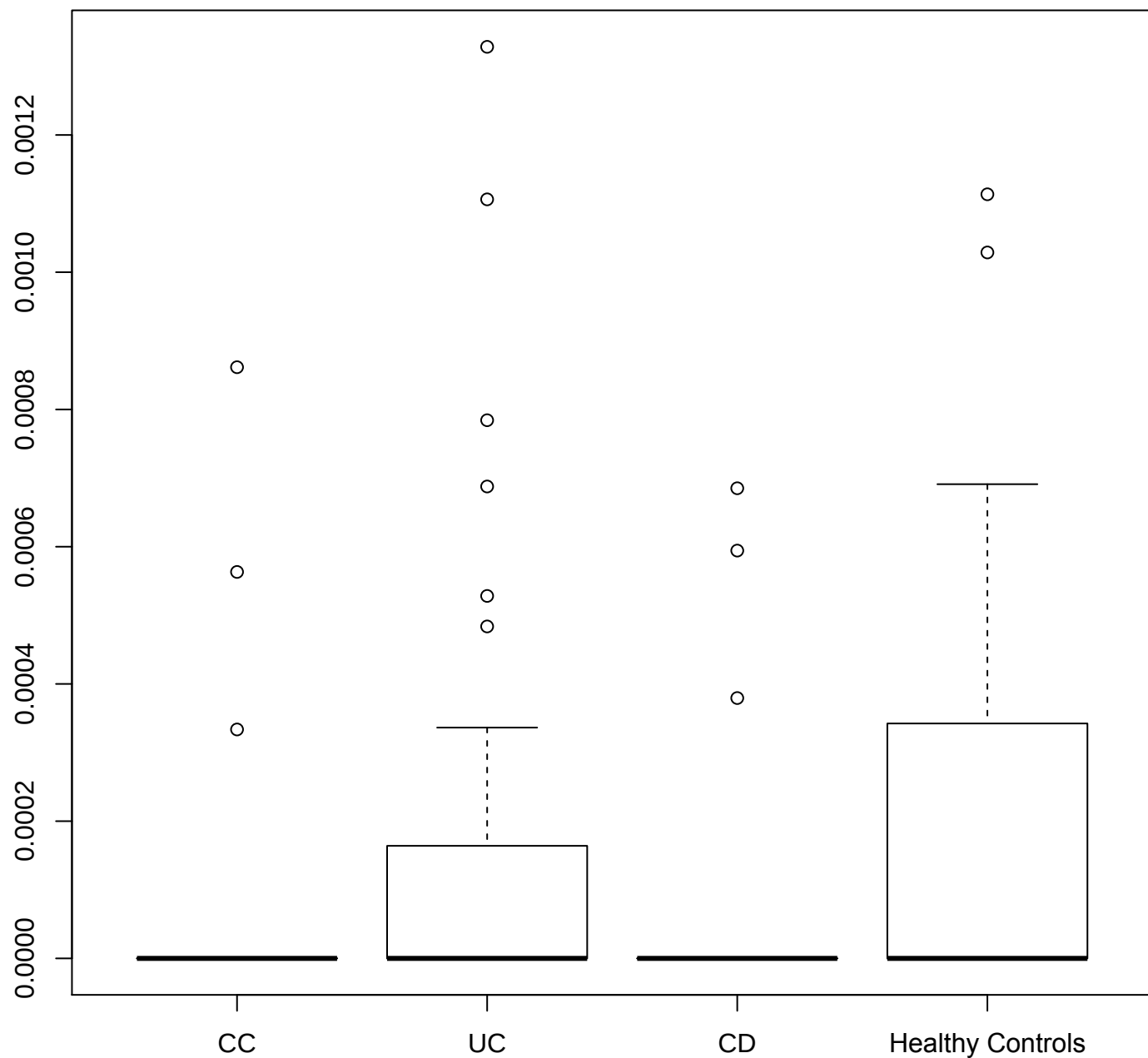
unclassified_Ruminococcaceae_159



unclassified_Ruminococcaceae_169



unclassified_Ruminococcaceae_182



p=0.02

Suppl table 2

Clinical characteristics of patients with
Collagenous colitis.

Supplemental table 1. Clinical characteristics of patients with collagenous colitis.

Individual	Sex	Age	Active disease	Oral steroids	History of other GI disease	Autoimmune diseases
1	♀	65	No	No	No	No
2	♀	57	No	Yes	No	No
3	♂	49	No	Yes	Celiac disease	No
4	♀	47	Yes	Unknown	Cholecystectomy	No
5	♀	33	No	No	No	No
6	♂	64	No	Yes	No	No
7	♂	70	No	Yes	No	No
8	♀	59	No	Yes	No	Rheumatoid arthritis, polyarthritis nodosa, thyrotoxicosis
9	♀	70	Yes	Yes	No	Hypothyroidism
10	♀	64	No	No	No	No
11	♀	75	Yes	Yes	No	No
12	♀	66	No	Yes	No	Sjögren's syndrome
13	♀	65	Yes	Yes	Former ileostoma, reinserted	Hypothyroidism
14	♀	64	No	Yes	Gastroduodenal ulcer, pyloric stenosis	No
15	♂	69	No	No	Cholelithiasis, biliary pancreatitis	No
16	♀	74	Yes	No	Celiac disease	No
17	♀	82	Yes	Yes	No	No
18	♀	81	No	No	No	No
19	♀	71	Yes	Yes	No	No
20	♀	62	Yes	Yes	No	No
21	♂	69	Yes	Yes	Celiac disease, Clostridium difficile infection	No
22	♂	66	No	No	No	No
23	♂	61	No	Yes	Celiac disease, inguinal herniation	No
24	♀	56	Yes	No	Celiac disease	Psoriasis, Alopecia areata
25	♀	56	No	No	No	No
26	♀	65	No	No	No	No
27	♀	63	No	Yes	Previous hepatitis B infection, cholelithiasis, pancreatic insufficiency	Vitiligo
28	♂	57	No	Yes	No	No
29	♀	68	No	No	Celiac disease	No

Suppl table 2

Clinical characteristics of patients with Crohn's disease and Ulcerative Colitis.

Suppl table 2, Patients data Crohn's Disease and Ulcerative Colitis

Diagnosis	ID	Sex	Age	Activity	Montreal	
CD	1	♂	61	active	colonic	non-penetr-strict
CD	2	♂	80	inactive	ileocolonic	strict
CD	3	♀	55	inactive	colonic	non-penetr-strict
CD	4	♂	71	inactive	ileal	strict
CD	5	♀	69	inactive	colonic	non-penetr-strict
CD	6	♂	42	inactive	ileal	strict
CD	7	♀	39	inactive	ileal	non-penetr-strict
CD	8	♀	48	inactive	ileal	strict
CD	9	♀	50	inactive	colonic	non-penetr-strict
CD	10	♀	20	active	ileal, upper GI	non-penetr-strict
CD	11	♀	71	inactive	ileal	strict
CD	12	♂	63	inactive	colonic	non-penetr-strict
CD	13	♀	22	inactive	colonic	non-penetr-strict
CD	14	♂	40	inactive	colonic	non-penetr-strict
CD	15	♂	34	active	colonic	non-penetr-strict
CD	16	♀	63	inactive	ileal	strict
CD	17	♀	42	inactive	ileocolonic	non-penetr-strict
CD	18	♀	48	inactive	colonic	non-penetr-strict
CD	19	♀	35	active	colonic	non-penetr-strict
CD	20	♂	57	inactive	ileal	penetr
CD	21	♂	41	inactive	colonic	non-penetr-strict
CD	22	♂	61	inactive	ileal	strict
CD	23	♀	45	inactive	colonic	non-penetr-strict
CD	24	♂	60	active	ileal	strict
CD	25	♂	76	inactive	ileal	penetr
CD	26	♂	65	inactive	ileal	strict
CD	27	♂	30	inactive	Ileocolonic, upper GI	non-penetr-strict
CD	28	♂	71	inactive	colonic	non-penetr-strict
CD	29	♂	25	inactive	ileal	strict
CD	30	♂	70	inactive	colonic	non-penetr-strict
CD	31	♀	62	inactive	ileal	strict
CD	32	♂	56	inactive	colonic	penetr
UC	1	♀	26	inactive	extensive	
UC	2	♂	84	inactive	left-sided	
UC	3	♂	30	active	extensive	
UC	4	♀	57	inactive	extensive	
UC	5	♀	60	inactive	extensive	
UC	6	♀	66	inactive	left-sided	
UC	7	♀	62	inactive	extensive	
UC	8	♂	54	inactive	left-sided	
UC	9	♂	70	inactive	extensive	
UC	10	♀	22	active	extensive	
UC	11	♀	54	inactive	extensive	
UC	12	♂	55	inactive	extensive	
UC	13	♀	59	inactive	extensive	
UC	14	♂	60	inactive	extensive	
UC	15	♀	33	inactive	extensive	
UC	16	♂	30	inactive	extensive	
UC	17	♀	51	inactive	left-sided	
UC	18	♀	75	inactive	left-sided	
UC	19	♂	61	inactive	left-sided	
UC	20	♂	34	inactive	extensive	
UC	21	♂	70	inactive	left-sided	

UC	22	♀	65	active	left-sided
UC	23	♂	48	unknown	extensive
UC	24	♀	61	inactive	extensive
UC	25	♂	73	inactive	left-sided
UC	26	♂	43	unknown	extensive
UC	27	♀	63	inactive	left-sided
UC	28	♂	68	inactive	left-sided
UC	29	♀	42	inactive	extensive
UC	30	♀	37	inactive	left-sided
UC	31	♀	59	inactive	extensive
UC	32	♂	65	inactive	extensive

CD=Crohn's Disease, UC=Ulcerative Colitis, penetr=penetrating, strict=stricturing