March 17, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 9305-review. Response to reviewers comments.docx).

**Title:** Heterogeneity across the Murine Small and Large Intestine

Author: R. Bowcutt, R Forman, M Glymenaki, S.R. Carding, K.J. Else, S.M. Cruickshank

Name of Journal: World Journal of Gastroenterology

**ESPS Manuscript NO:** 9305

We thank the reviewers for their comments. The manuscript has been improved according to the suggestions of the reviewers with all changes indicated in red font in the manuscript:

## **Reviewer 1:**

1) Title and abstract: the aim of this article concern difference of large and small intestine in the mice. This isn't mentioned in title and in abstract.

We have now modified the title and abstract to clarify the focus on the mouse small and large intestine.

2) Text: intestinal epithelial cells: Lign 6: six major differentiated epithelial cell types?

We have now clarified this in the text. Page 4, Line 3

3) lign 8- lign 17: in this paragraph there is many repetition:"Paneth cells are only found in the small intestine" (mentioned in lign 4); "Paneth cells may directly recognise pathogen" = "may contribute to the relatively low bacterial burden" = "act as mediators in host defence against pathogens" lign 30: "REG3y expression is minimal in the large intestine .." mentioned in lign 22; and in lign 23 in paragraph mucus and mucins.

We have now modified the text to reduce repetition. Please see page 4 line 29 - 31, page 5 line 6-10 and have deleted text on page 7 line 4.

4) Abreviations: slgA, Treg, CXCR1 int, hi, Ly6C, TCR

We apologise for the confusion and have now defined all abbreviations when first used in the text. slgA is defined line 19 page 7. CX3CR1 is defined as fracktalkine receptor on line 30 page 10. Ly6C is defined on page 11 line 25. TCR is defined in page 16 line 27. Treg is defined on page 17 line 12.

## 5) References: we can decrease the number of references 199 references are mentioned but there are 192 in the texte

We apologise for this confusion- there are additional references in Table 1 that do not appear in the main text.

## Reviewer 2

No revisions were suggested.

Thank you again for publishing our manuscript in the World Journal of Gastroenterology.

Sincerely yours,

Theena Cruichelanh.

Sheena Cruickshank, Lecturer in Immunology R4.004 AV Hill Building University of Manchester

0161 275 1582