

## John S Poulton, PhD

Postdoctoral Fellow

Lineberger Comprehensive Cancer Center and Department of Biology

University of North Carolina at Chapel Hill

Chapel Hill, NC 27599-3280

[poultonj@email.unc.edu](mailto:poultonj@email.unc.edu)

(919) 962-2272

## Academic Training

2009-Present	Postdoctoral Fellow	University of North Carolina at Chapel Hill
2009	PhD, Cell and Molecular Biology	Florida State University, Tallahassee
2001	MS, Ecology and Evolution	Florida State University, Tallahassee
1994	BS, Biology	Florida State University, Tallahassee

## Publications

15. **Poulton JS**, Cunningham J, Peifer M. (2014) Acentrosomal Drosophila Epithelial Cells Exhibit Abnormal Cell Division, Leading to Cell Death and Compensatory Proliferation. *Developmental Cell*. <http://dx.doi.org/10.1016/j.devcel.2014.08.007>
14. **Poulton JS**, Mu FW, Roberts DM, Peifer M. (2013) APC2 and Axin promote mitotic fidelity by facilitating centrosome separation and cytoskeletal regulation. *Development*. Oct;140(20):4226-4236
13. Huang YC, Smith L, **Poulton JS**, Deng W-M. (2013) The microRNA *miR-7* regulates Tramtrack69 in a developmental switch in Drosophila follicle cells. *Development*. Feb;140(4):897-905
12. Gao L, Shao L, Higgins CD, **Poulton JS**, Peifer M, Davidson MW, Wu X, Goldstein B, Betzig E. (2012) Noninvasive Imaging of Three-Dimensional Dynamics in Thickly Fluorescent Specimens Beyond the Diffraction Limit. *Cell*. Dec;151(6):1370-85
11. Roberts DM, Pronobis MI, **Poulton JS**, Kane EG, Peifer M. (2012) Regulation of Wnt signaling by the tumor suppressor APC does not require ability to enter the nucleus nor a particular cytoplasmic localization. *Molecular Biology of the Cell*. Jun;23(11):2041-56
10. Roberts DM, Pronobis MI, Alexandre KM, Rogers GC, **Poulton JS**, Schneider DE, Jung KC, McKay DJ, Peifer M. (2012) Defining components of the Beta-Catenin destruction complex and exploring its regulation and mechanisms of action during development. *PLoS One*. 7(2):e31284
9. **Poulton JS**, Huang YC, Smith L, Sun J, Leake N, Schleede J, Stevens LM, Deng W-M. (2011) The microRNA pathway regulates the temporal pattern of Notch signaling in Drosophila follicle cells. *Development*. May;138(9):1737-45
8. Roberts DM, Pronobis MI, **Poulton JS**, Waldmann JD, Stephenson EM, Hanna S, Peifer M. (2011) Deconstructing the Beta-Catenin destruction complex: mechanistic roles for the tumor suppressor APC in regulating Wnt signaling. *Molecular Biology of the Cell*. Jun 1;22(11):1845
7. Tamori Y, Bialucha CU, Tian AG, Kajita M, Huang YC, Norman M, Harrison N, **Poulton JS**, Ivanovitch K, Disch L, Liu T, Deng W-M, Fujita Y. (2010) Involvement of Lgl and Mahjong/VprBP in cell competition. *PLoS Biology*. Jul 13;8(7):e1000422
6. Sagona AP, Nezis IP, Pedersen NM, Liestøl K, **Poulton JS**, Rusten TE, Skotheim RI, Raiborg C, Stenmark H. (2010) PtdIns(3)P controls cytokinesis through KIF13A-mediated recruitment of FYVE-CENT to the midbody. *Nature Cell Biology*. Apr;12(4):362-71
5. Yu J\*, **Poulton JS\***, Huang YC, Deng W-M. (2008) The Hippo pathway promotes Notch signaling in regulation of cell differentiation, proliferation, and oocyte polarity. *PLoS One*. 3(3):e1761 \*equal contribution

4. **Poulton JS** and Deng W-M. (2007) Cell-cell communication and axis specification in the *Drosophila* oocyte. *Developmental Biology*. 311(1):1-10
3. Schneider M, Khalil AA, **Poulton JS**, Castillejo-Lopez C, Egger-Adam D, Wodarz A, Deng W-M, Baumgartner S. (2006) Perlecan and Dystroglycan act at the basal side of the *Drosophila* follicular epithelium to maintain epithelial organization. *Development*. 133(19):3805-3815
2. **Poulton JS** and Deng W-M. (2006) Dystroglycan down-regulation links EGF receptor signaling and anterior-posterior polarity formation in the *Drosophila* oocyte. *Proceedings of the National Academy of Sciences USA*. 103(34):12775-12780
1. **Poulton JS** and Winn A. (2002) Costs of canalization and plasticity in response to neighbors in *Brassica rapa*. *Plant Species Biology*. 17:109-118

## **Manuscripts in Preparation**

- Lerit DA, **Poulton JS**, Jordan HA, Peifer M, and Rusan N. Novel Pericentrin structures orchestrate the PCM in rapidly dividing embryos.
- Terzo EA, Lyons SM, **Poulton JS**, Penke TJR, Tatomer DC, Marzluff WF, Duronio RJ. Mxc is a scaffolding protein that requires a LisH domain to assemble and localize to a histone locus body (HLB).

## **Fellowships and Awards**

NIH, NRSA Postdoctoral Fellowship (\$98,000)	2010-2012
Lineberger Comprehensive Cancer Center Training Grant (\$38,500)	2009-2010
Dissertation Research Grant, FSU (\$500)	2009
Margaret Menzel Scholarship, FSU (\$2,000)	2008
American Heart Association Predoctoral Fellowship (\$48,000)	2006-2007
Research and Creativity Award, FSU (Laptop Computer)	2007

## **Teaching Experience**

**University of North Carolina at Chapel Hill** Instructor of Record– Cell Biology

**Florida State University** Instructor – Genetics short course. Teaching Assistant – Genetics (3x), Plant Development, and several lab courses

## **Meeting Presentations and Invited Seminars**

- 2014**
- American Society for Cell Biology (ASCB) Triangle Cytoskeleton Meeting. Research Triangle Park, NC. Platform presentation
  - Genetics Society of America (GSA) *Drosophila* Research Conference. San Diego, CA. Workshop and Poster presentations
- 2013**
- ASCB, New Orleans, LA. Poster and ePoster presentations
- 2012**
- GSA *Drosophila* Research Conference. Chicago, IL. Platform presentation
  - Duke University. Durham, NC. Invited Speaker
- 2011**
- GSA *Drosophila* Research Conference. San Diego, CA. Poster presentation
- 2010**
- University of North Carolina at Asheville. Invited Speaker
  - GSA *Drosophila* Research Conference. Poster Presentation
- 2009**
- Carnegie Institute. Baltimore, MD. Invited Speaker
  - National Institutes of Health. Bethesda, MD. Invited Speaker
- 2008**
- GSA *Drosophila* Research Conference. San Diego, CA. Poster presentation
- 2006**
- Society for Developmental Biology, SE. Athens, GA. Platform presentation
  - GSA *Drosophila* Research Conference. Houston, TX. Poster presentation
- 2005**
- GSA *Drosophila* Research Conference. San Diego, CA. Workshop and Poster presentations