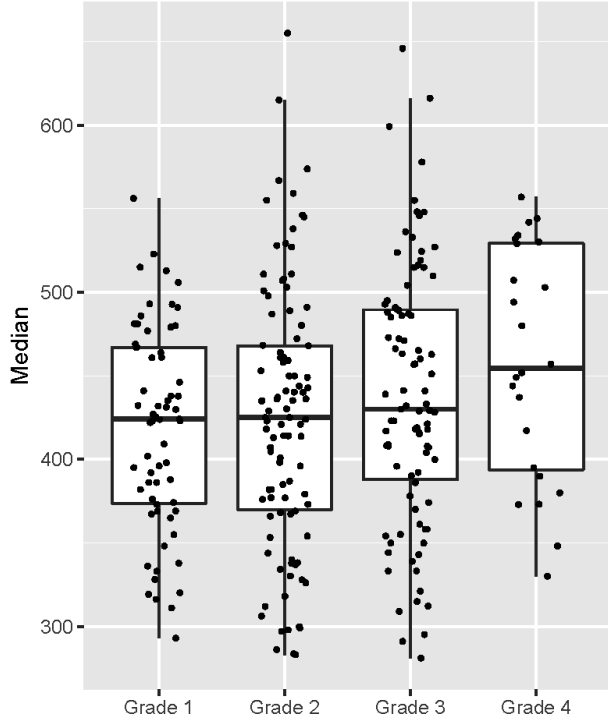


**S2 Fig. These plots contain the 277 cases that were concordant between TCGA and Pathologist 1 using the 2-tiered grading system.** Nine morphological features (**1**: Area, **2**: Roundness, **3**: Elongation, **4**: Flatness, **5**: Perimeter, **6**: Equivalent Spherical Perimeter, **7**: Equivalent Spherical Radius, **8**: Minor Axis of the Ellipse Fit, and **9**: Nuclei Major Axis of the Ellipse Fit) were plotted with their median and median absolute deviation values. Each feature and measure was stratified either by the 4-tiered (**A and B**) or 2-tiered (**C and D**) grades assigned by Pathologist 1, respectively.

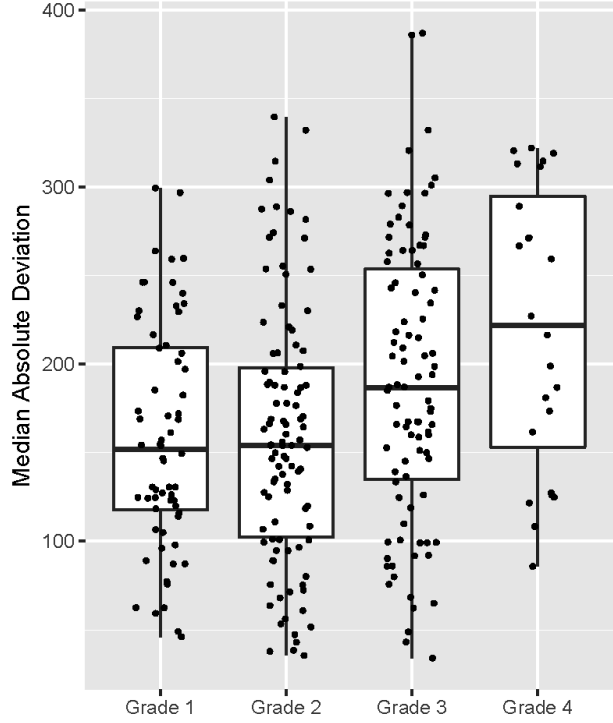
# 1 Nuclei Area

A.



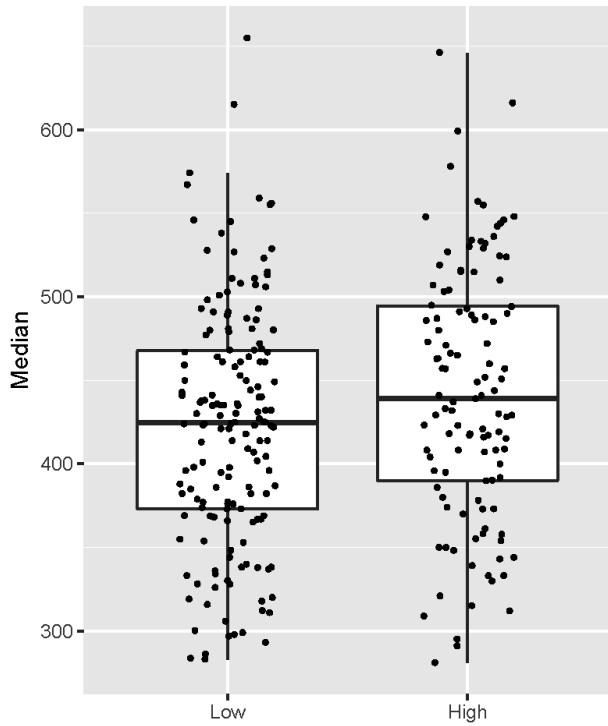
$p=9.20e-02$

B.



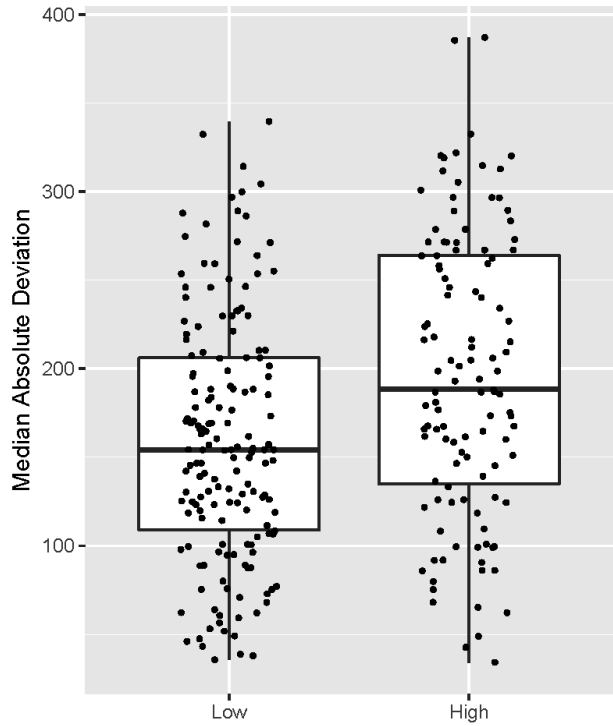
$p=7.86e-04$

C.



$p=3.36e-02$

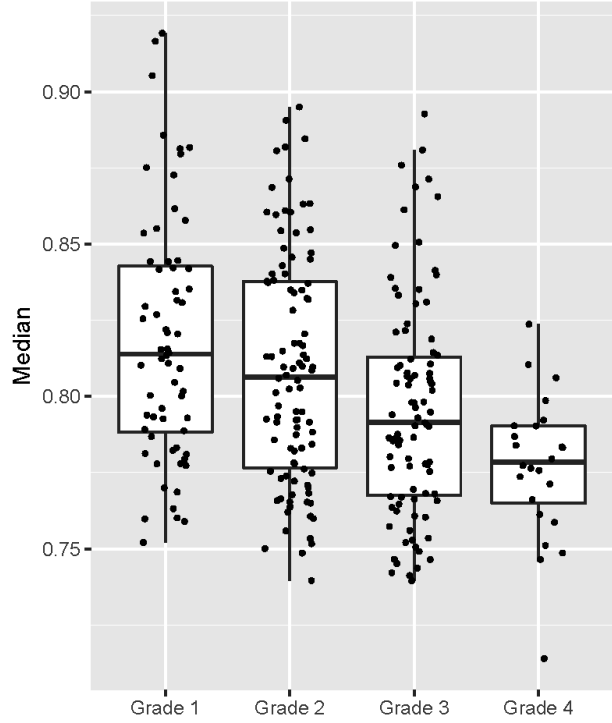
D.



$p=1.69e-04$

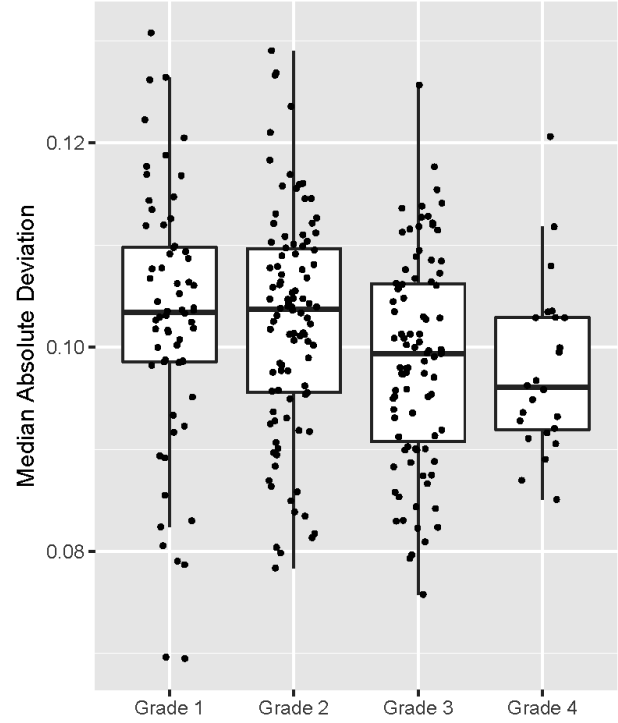
## 2 Nuclei Roundness

A.



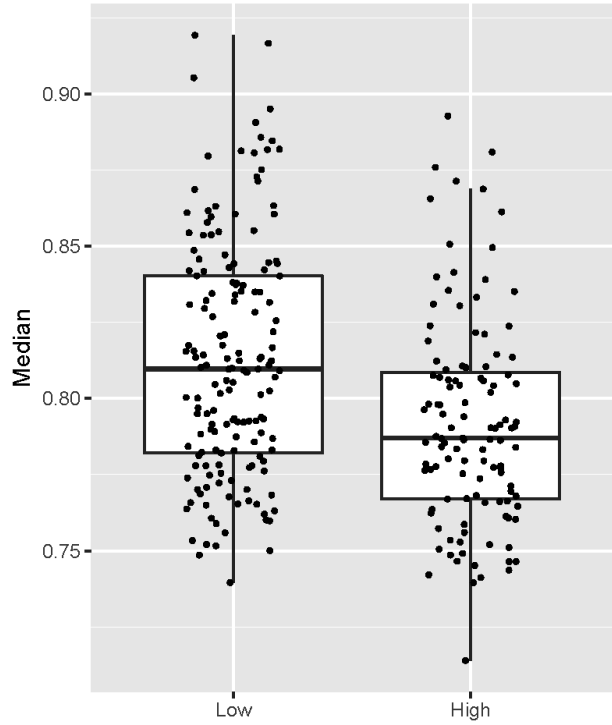
$p=9.17e-06$

B.



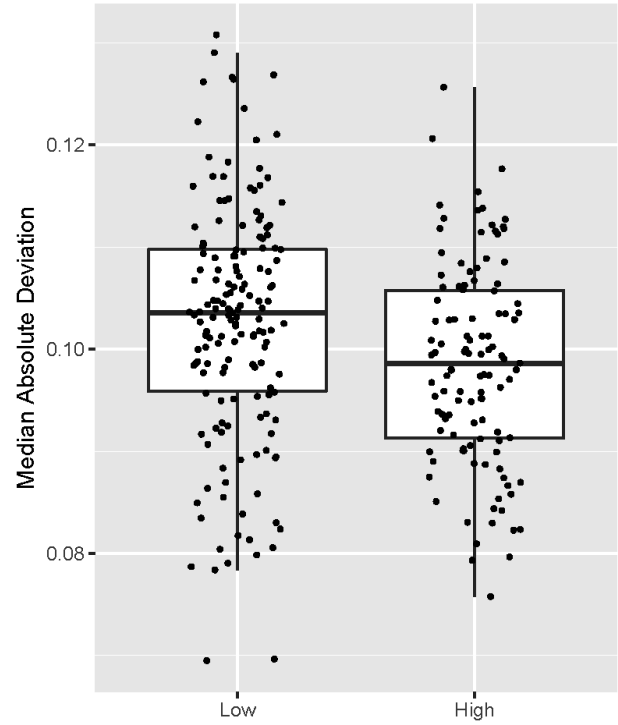
$p=6.43e-03$

C.



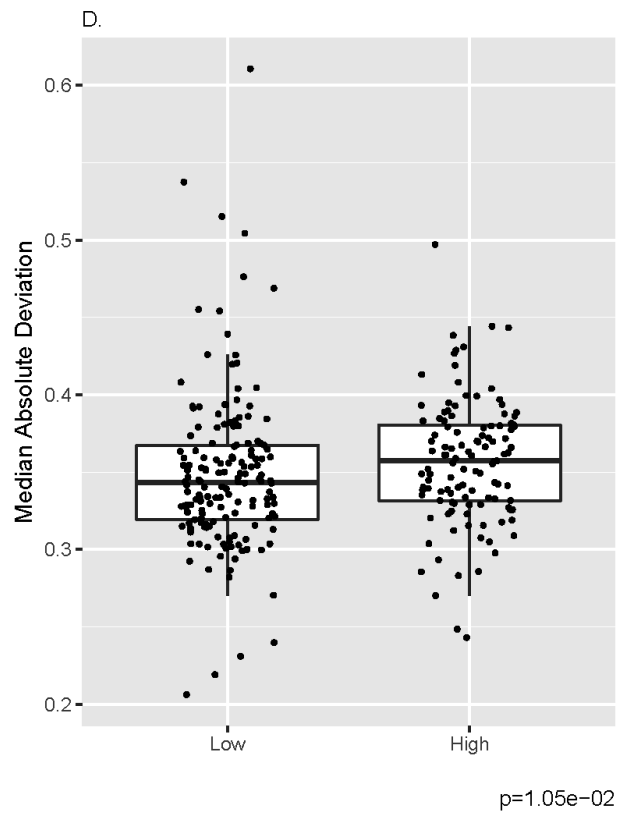
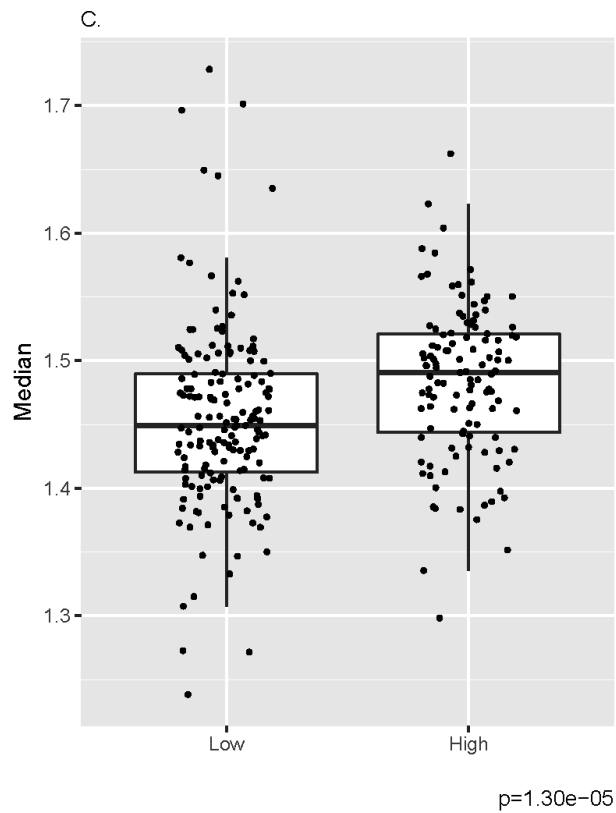
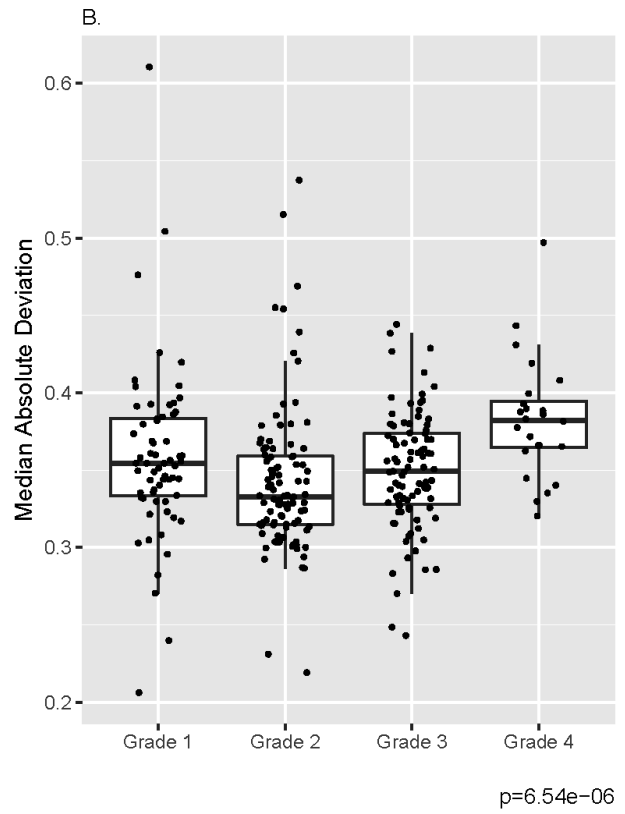
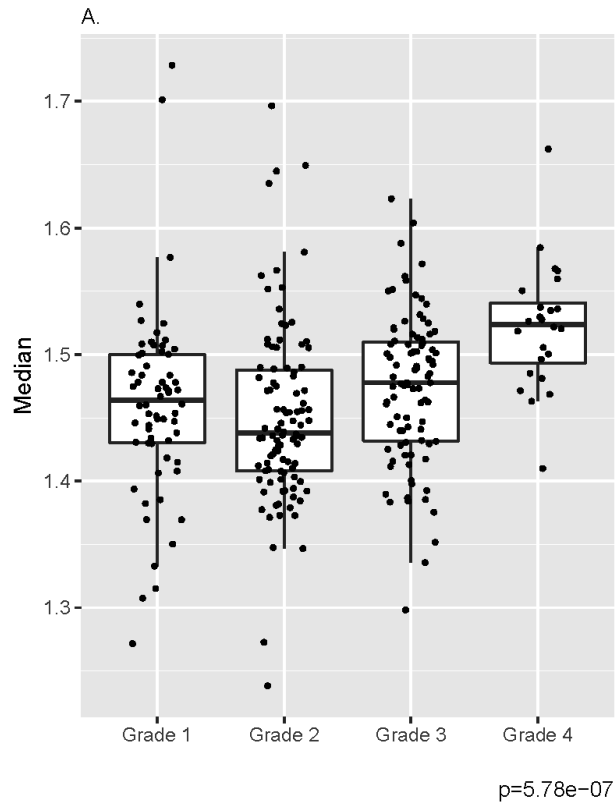
$p=1.18e-05$

D.

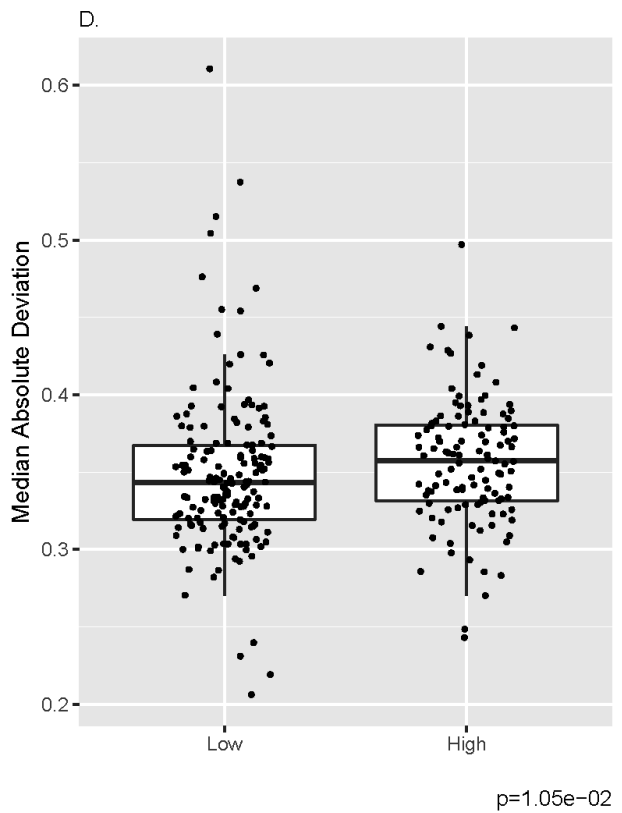
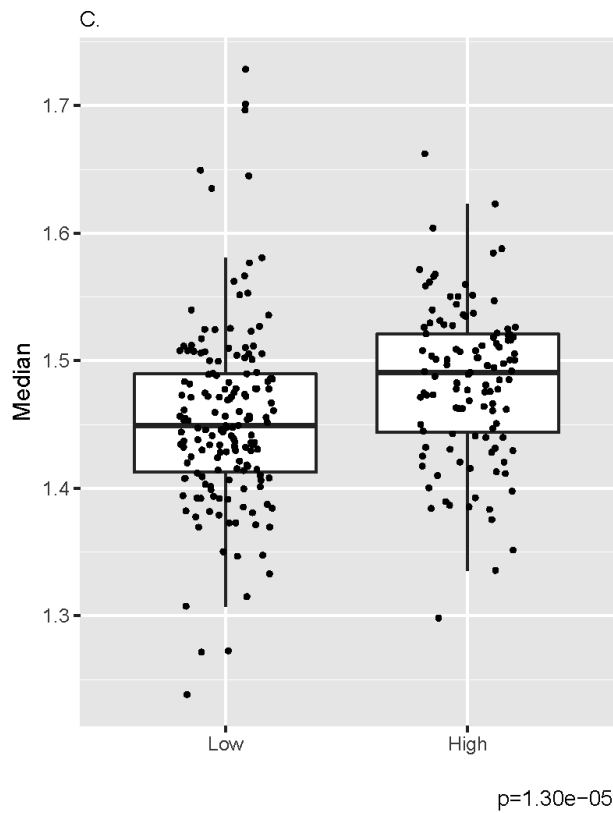
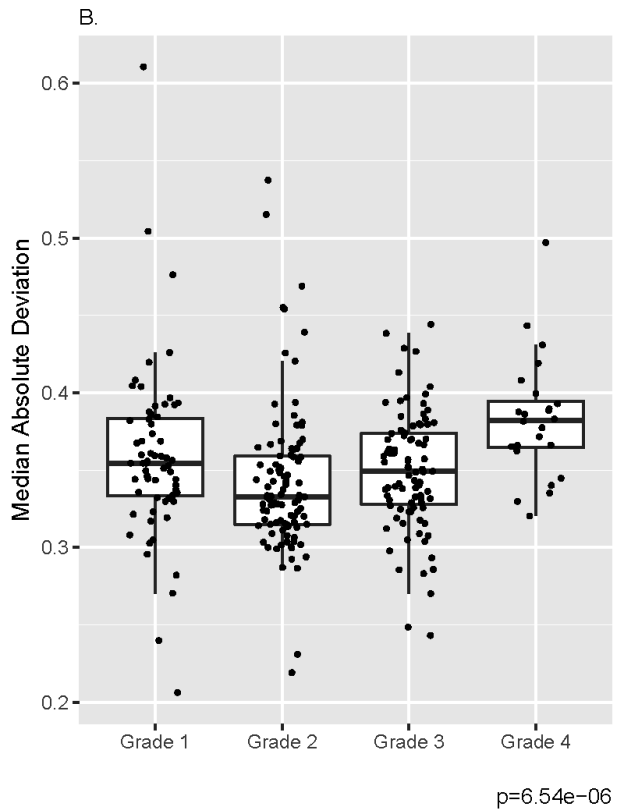
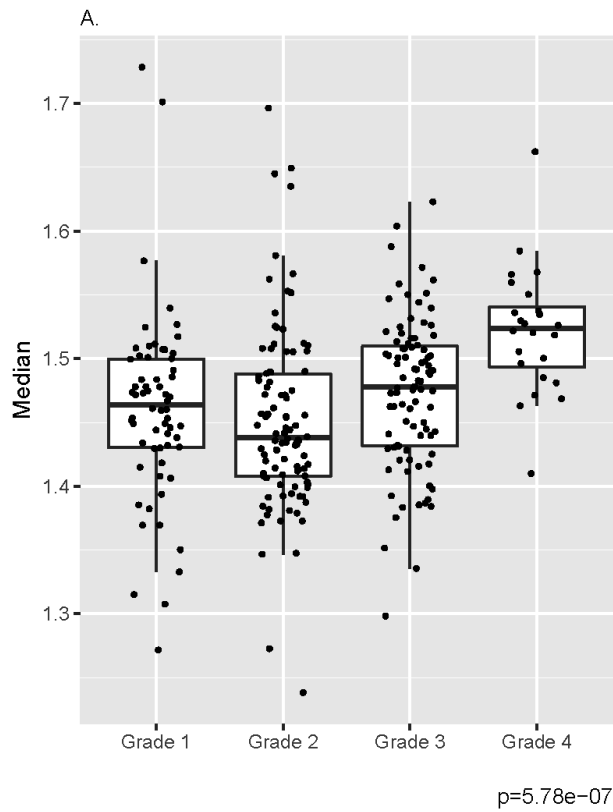


$p=6.63e-04$

### 3 Nuclei Elongation

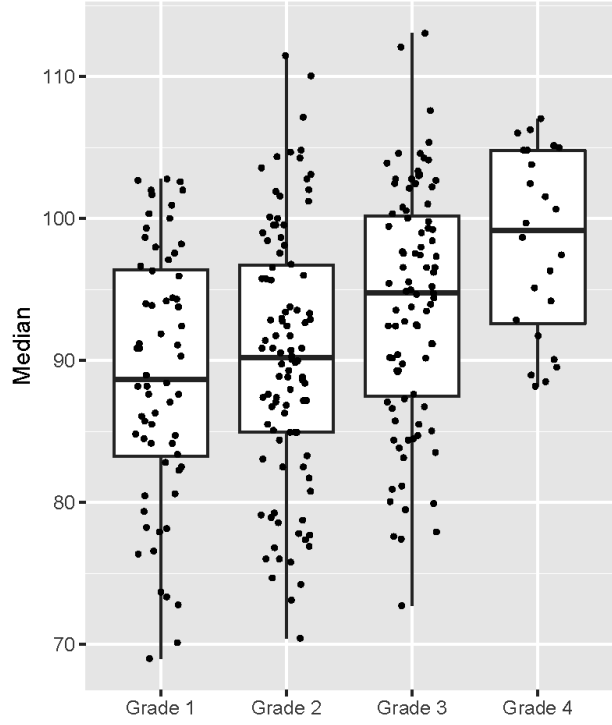


# 4 Nuclei Flatness



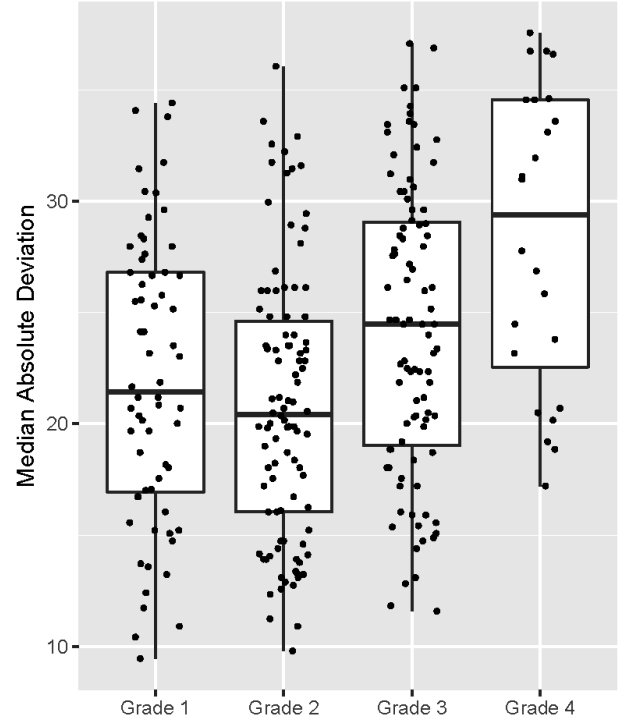
### 5 Nuclei Perimeter

A.



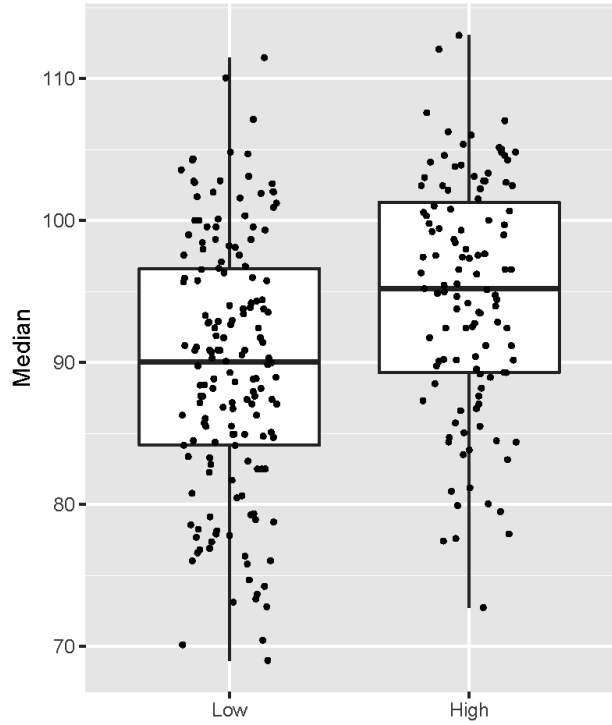
$p=9.11e-06$

B.



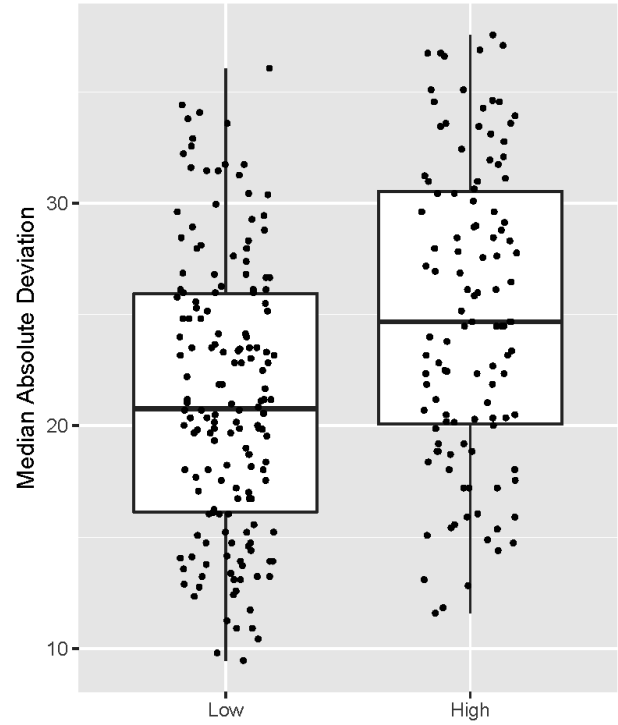
$p=8.10e-06$

C.



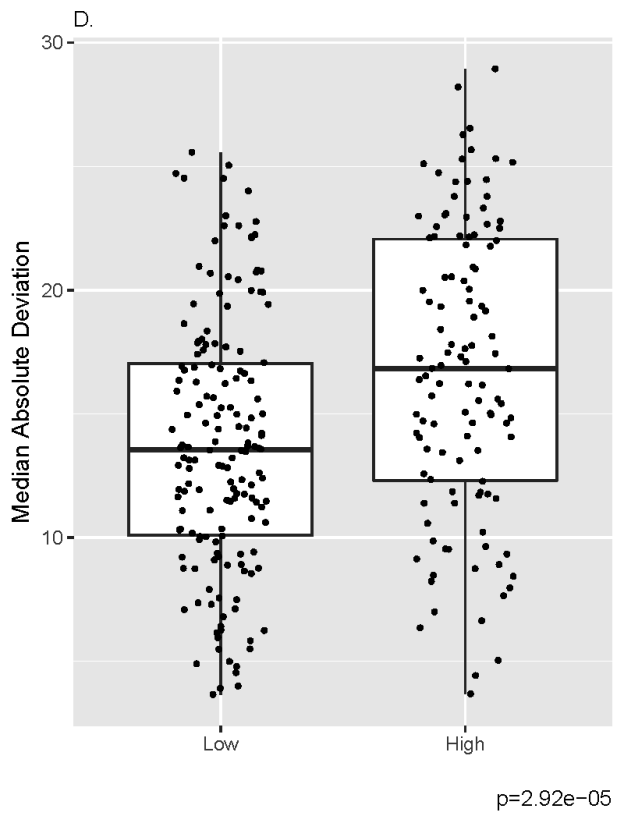
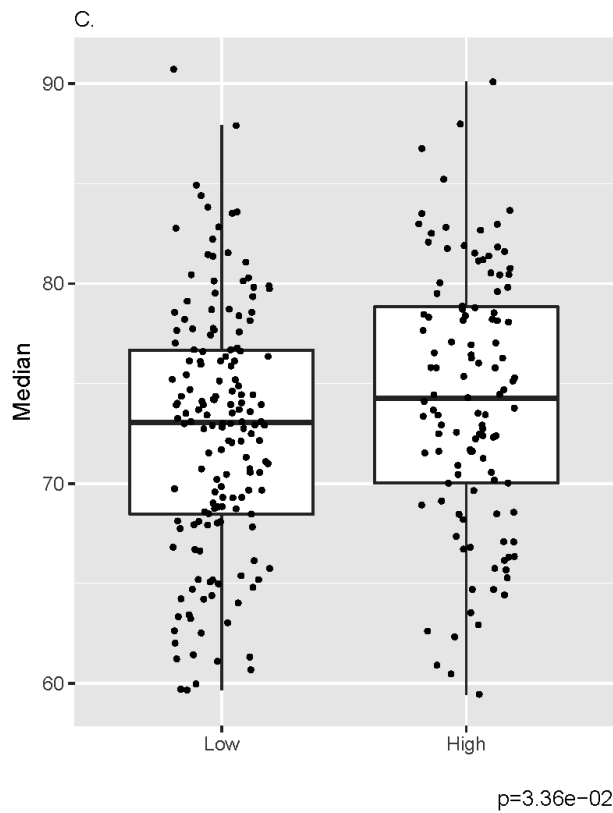
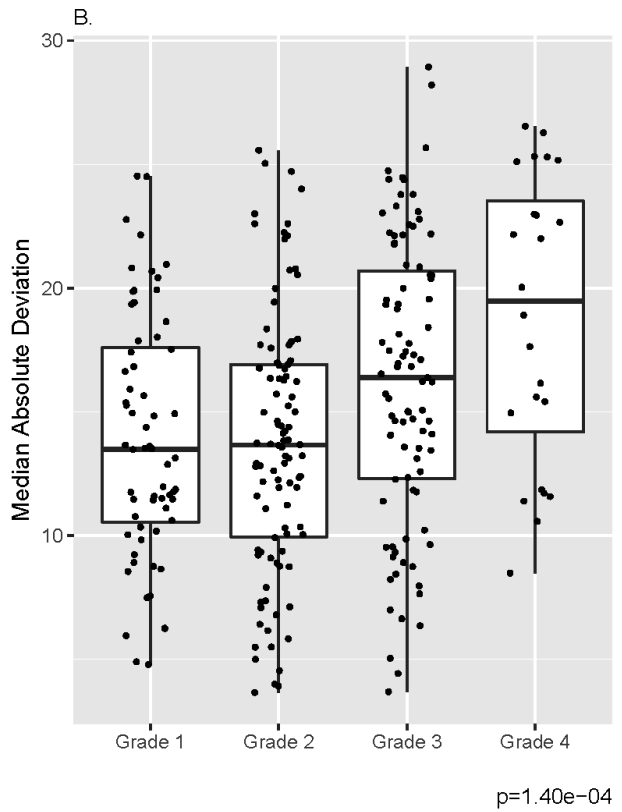
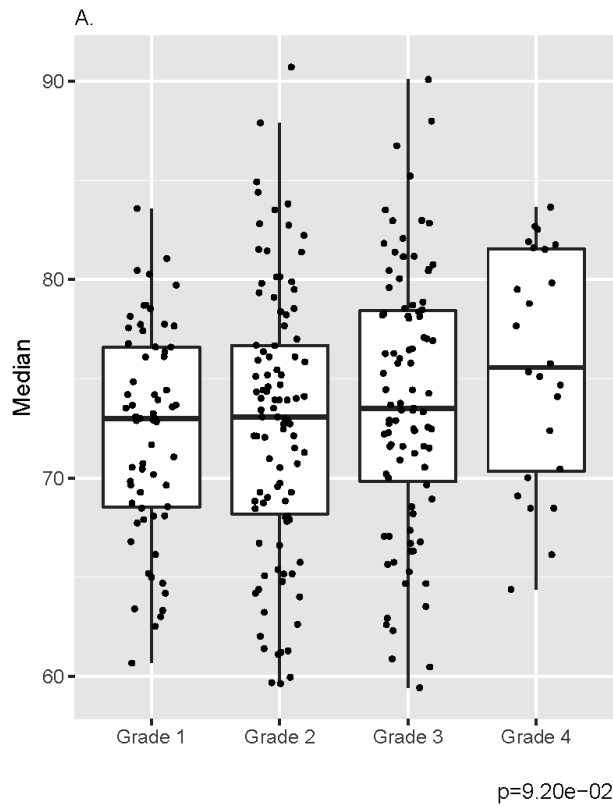
$p=6.31e-06$

D.

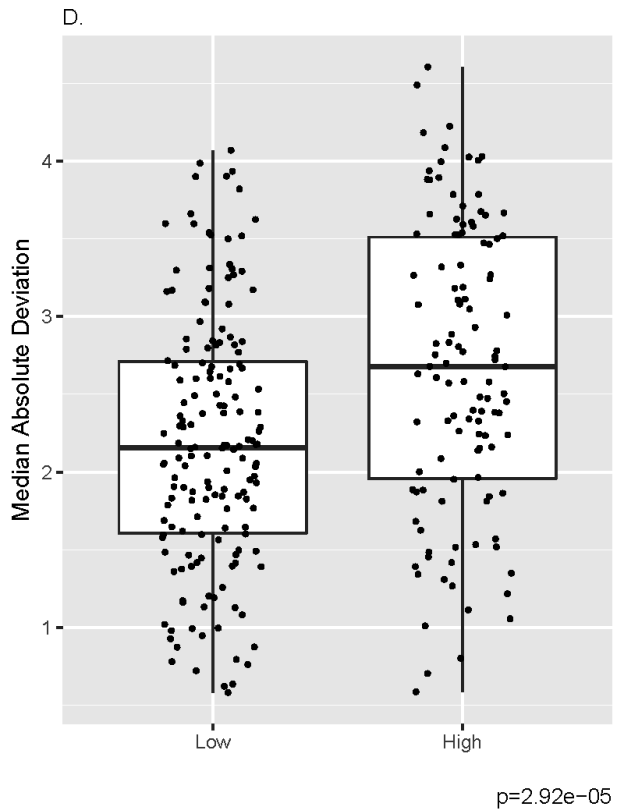
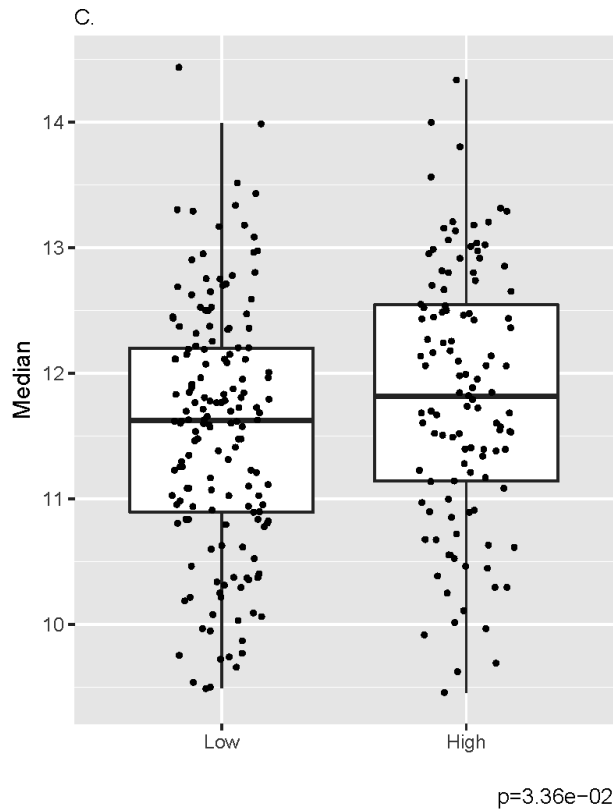
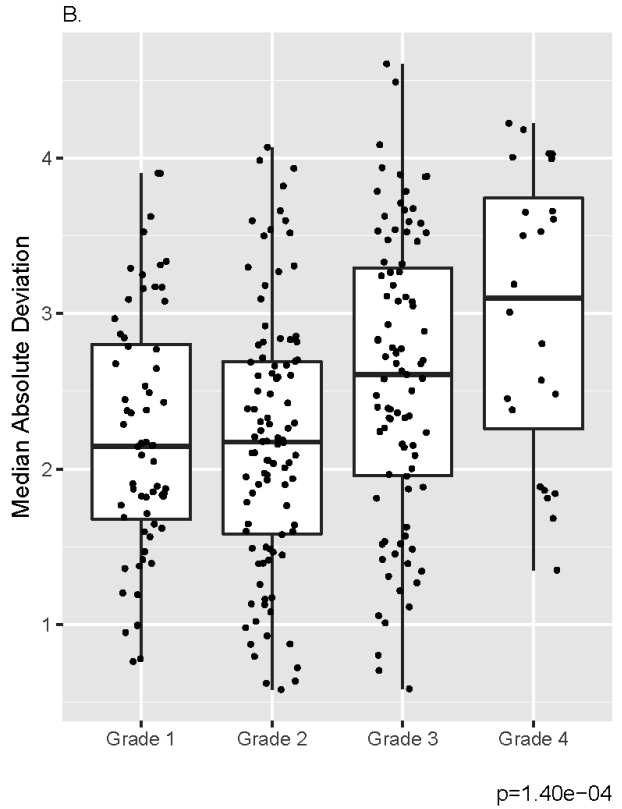
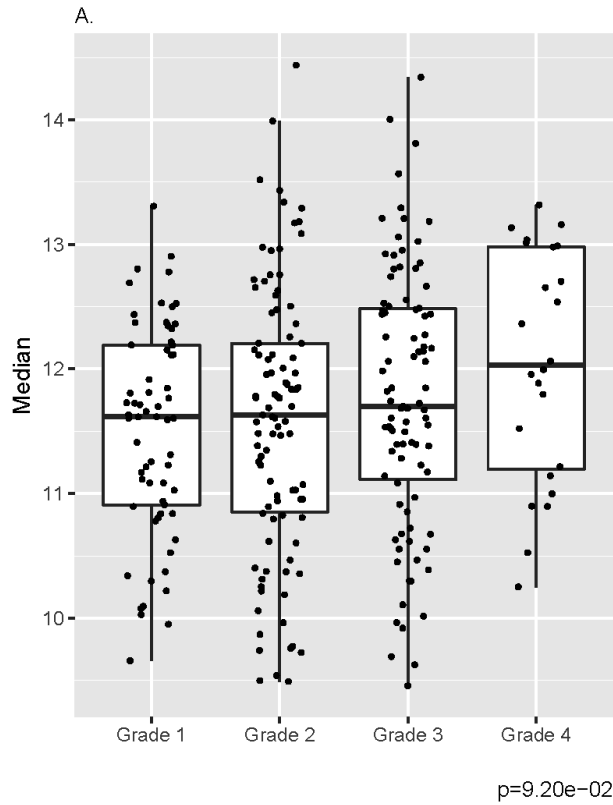


$p=1.08e-05$

# 6 Nuclei Equivalent Spherical Perimeter

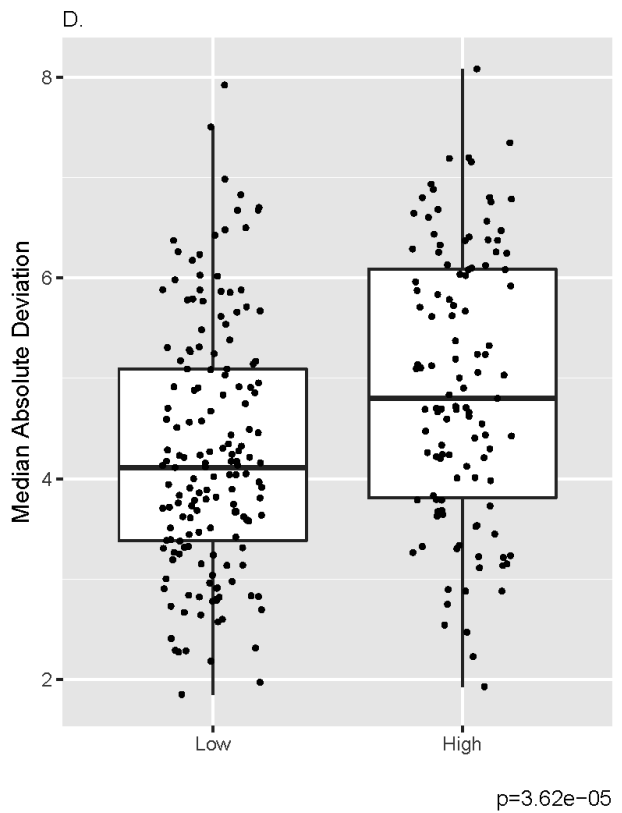
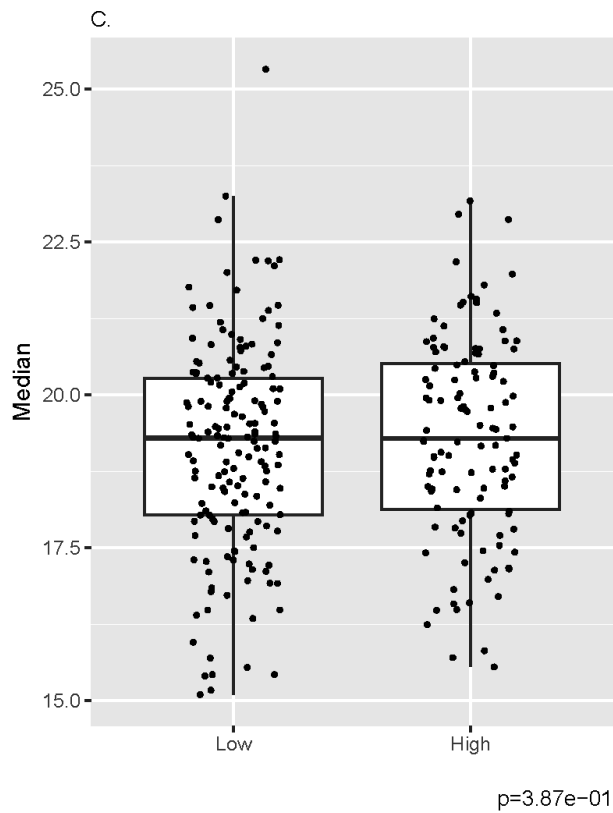
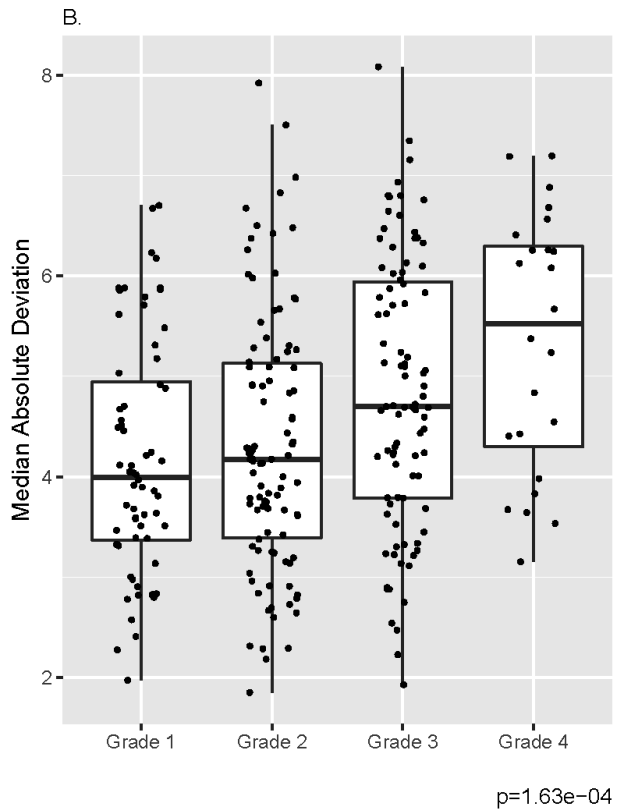
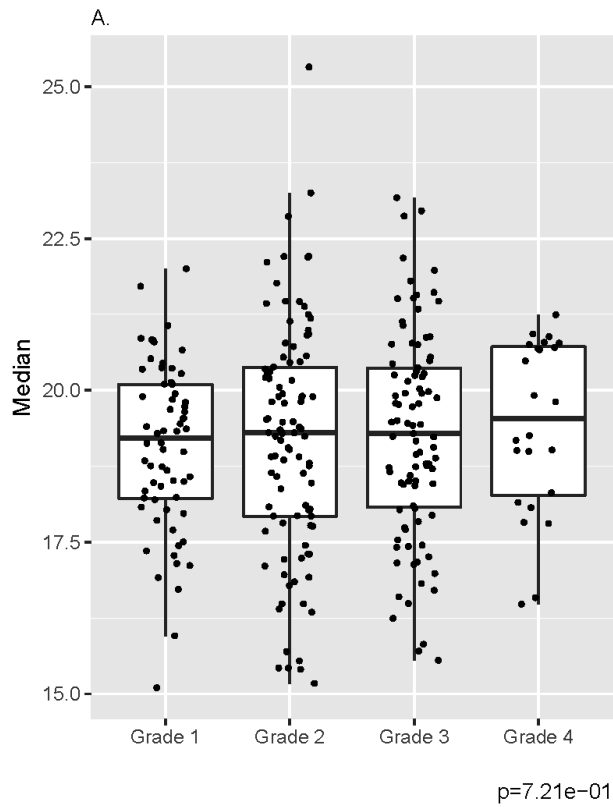


# 7 Nuclei Equivalent Spherical Radius





# 8 Nuclei Minor Axis of the Ellipse Fit



# 9 Nuclei Major Axis of the Ellipse Fit

