Image analysis pipeline outline using freely available software and manual segmentation; deep-learning approach requires a commercial program (MATLAB) and is available upon request from Dr. Berkowitz (baberko@med.wayne.edu).

1. Our in-house lab manual for performing the image analysis walks you through most of the process.
2. In brief:
   1. Run “Prep for Daves registration of OCT” imagej macro; edit macro (remove //) if you are importing \*.OCT data.
   2. Run “BLANK\_[click\_here\_to\_open\_R] “ to open R and then run REG\_2019\_100419.R” R script to register and get mean output
   3. Run “Prep for Daves OCT analysis” imagej macro to draw estimated laminar regions
   4. Run “\_center\_MOUSE\_OCT\_2020\_09SEP\_04b” R script to generate layer thickness spreadsheet (called “Stack\_first-image-only\_thickness\_details\_c”; RAS (called “Stack\_RAS--ALL “) and AS (called “Stack\_AS—ALL”) images
   5. Run “RUN\_THIS\_ON\_Stack\_c\_FILE\_TO\_GET\_HQ\_STYLE\_2022-03MAR-27” R script to generate hyporeflective band spreadsheet.
   6. Run “Propogate squished inferior min max and ROI”; requires “squished 100x259 Inferior template.tif” to set ROI.
   7. Run “Fit\_Ellipse” imagej macro to get inferior ISez aspect ratio”.
   8. Repeat f. and g. but using “Propogate squished inferior min max and ROI”; requires “squished 100x259 Inferior template.tif” to set ROI and get superior ISez aspect ratio