@Nicolas highlighted in yellow means I've pointed Nicolas to these particular ones.

BROKEN in green means tutorial is fixed so it runs, but there is some additional aspect that  
I think needs attention.

Need to think about wvfCompute and LCA, as well as rng state, as per email exchange.

I have started putting @Nicolas and @Brian into places in the source that could use a look over.

For example, places where structs are being accessed directly rather than through sets and gets.

I am not sure we want demos buried in directories like

isettools/ganglioncells/demos

why aren't the demos in there under tutorials, which is where we would be looking for them?

/Users/dhb/Documents/MATLAB/toolboxes/isetbio/tutorials/cmosaic/t\_cMosaicModifyApertureProperties.m -- BROKEN!

@Nicolas

This had a typo which I fixed and now it runs. But something it calls prints out a warning  
 \*\* structs 's1' and 's2' have different number of fields: 4 vs 3

which reduces confidence that it is right.

/Users/dhb/Documents/MATLAB/toolboxes/isetbio/tutorials/cmosaicrect/t\_cmosaicRectBigArray.m -- BROKEN!

@Brian, 12/25

I fixed this so it runs by updating 'show' -> 'plottype' in the call to the window method of coneMosaicRect. But,

if you run it to the end it produces a strange plot that looks like this:

A screenshot of a computer

Description automatically generated

/Users/dhb/Documents/MATLAB/toolboxes/isetbio/tutorials/cones/t\_conesEyeSensitivity.m -- BROKEN!

@Nicolas, we need to keep enough of the hex mosaic method do generate a hexagonal lattice for cMosaic.

This is a tree shrew related tutorial. It was calling a function coneMosaicTreeShreeCreate, which fails because

we no longer have a cone mosaic. I switched to cMosaicTreeShrewCreate, but that fails because it also calls

coneMosaicHex. It looks like this is to get cone positions. We need to remove this dependence.

/Users/dhb/Documents/MATLAB/toolboxes/isetbio/tutorials/eyemovement/t\_fixationalEyeMovementsAndConeMosaicVideo.m -- BROKEN!

This one is broken because it loads a precomputed coneMosaicHex. Need to convert to cMosaic.

/Users/dhb/Documents/MATLAB/toolboxes/isetbio/tutorials/eyemovement/underDevelopmentReplaceConeMosaicHex/t\_fixationalEMConeSampling.m -- BROKEN!

/Users/dhb/Documents/MATLAB/toolboxes/isetbio/tutorials/eyemovement/underDevelopmentReplaceConeMosaicHex/t\_fixationalEMTimeSampling.m -- BROKEN!

/Users/dhb/Documents/MATLAB/toolboxes/isetbio/tutorials/eyemovement/underDevelopmentReplaceConeMosaicHex/t\_fixationalEyeMovementsToIsomerizations.m -- BROKEN!

Asked @Nicolas to work on broken oisCreate examples. circa 12/20, which might fix thee oisCreate problems with these. Currently they die in oisCreate with fairly simple usage. Not sure what the  
 issue is. Once that problem is addressed, we also need to convert to cMosaic.

/Users/dhb/Documents/MATLAB/toolboxes/isetbio/tutorials/hyperspectral/underDevelopmentReplaceConeMosaicHex/t\_hyperspectralSceneTutorial.m -- BROKEN!

Dies because it is trying to read data from the archiva server. Needs to be fixed up to read data from somewhere else.

Will also need to replace coneMosaicHex.

/Users/dhb/Documents/MATLAB/toolboxes/isetbio/tutorials/oisequences/t\_oisCreate.m -- BROKEN!

This might get fixed when the examples in oisCreate get fixed. Have asked @Nicolas to work on this, circa 12/20.

This was dying because we didn't have sceneVernier in the ISETCam branch. I moved

that and some other scene utilities in. Now it is dying on the actual call to sceneVernier.

There is some tangling of the way the arguments are being passed from oisCreate to

sceneCreate circa line 200, but I can't follow the logic easily.

Operator ':' is not supported for operands of type 'struct'.

Error in sceneCreate>sceneVernier (line 1176)

topCols = (1:width) + round((c - width)/2) - floor(offset/2);

Error in sceneCreate (line 493)

scene = sceneVernier(scene,sz,width,offset,lineReflectance,backReflectance);

Error in oisCreate (line 201)

s cene{ii} = sceneCreate('vernier', 'display', tparams(ii));

Error in t\_oisCreate (line 139)

[vernier, scenes] = oisCreate('vernier', 'add', stimWeights, ...

/Users/dhb/Documents/MATLAB/toolboxes/isetbio/tutorials/optics/t\_wvfWatsonJOV.m -- BROKEN!

Got this to work again. There is a comment from before that Brian and I should try

to figure out why the figures we produce don't match up with Watson's. Maybe

a microns/diopters issue in specification of zcoeffs? Just a guess.

/Users/dhb/Documents/MATLAB/toolboxes/isetbio/tutorials/recipes/t\_computingWithCustomPSFs.m -- BROKEN!

This is broken because a call to opticsGet(optics,'psf support', ...) appears has quite a different calling convention now than

it once did. Not sure why, nor is it immediately clear how to get the new needed args to pass.

This was also broken for a different reason in the ISETBio branch, so once the opticsGet problem is fixed

there may be additional issues.

/Users/dhb/Documents/MATLAB/toolboxes/isetbio/tutorials/outersegment/underDevelopment\_os/t\_osCurrentsVsLuminanceLevel.m -- BROKEN!

Fixed so it runs again. It was underDevelopment, I think, because it is sufficiently undercommented as not to be useful as a tutorial.

Which is to say, the only comments are ones DHB added some time ago, kvetching about the lack of comments.

It does produce some nice looking figures, so could be quite useful if we knew what it was about.

/Users/dhb/Documents/MATLAB/toolboxes/isetbio/tutorials/wavefront/underDevelopment/t\_wvfComputeAverageObserverConePSF.m -- BROKEN!

This is under development and throws an error that says so. It should not be autorun. We should update it, though.

Let's not use red text to print out expected things. An example is t\_roiBasic.m. Red text screams out, "I am broken". More generally,

we should try to avoid have tutorials throw warnings. Other ones to look at in this regard:

t\_mRGCMosaicVisualize.m

t\_mRGCMosaicBasic.m

t\_fixationalEyeMovementsAndConeMosaicVideo.m

t\_conesEyeSensitivity.m

t\_cMosaicRankedSubjectsOptics.m

t\_cMosaicModifyApertureProperties

t\_cMosaicAndOpticsGrid