Optseq tries

* I downloaded on opera optseq ? \*
  + at <https://ftp.nmr.mgh.harvard.edu/pub/optseq/Cygwin/>
* Downloaded optseq2.exe (Cygwin version) and put this into the Cygwin-64 folder
* I run Cygwin and change my directory to Cygwin-64 where the optseq2 is
* I followed instructions from previous email trails so I typed in

chmod a+x optseq2 (to make optseq2 executable within the shell?)

* Then I typed in ./optseq2 (since typing in optseq2 on its own

results in -bash: optseq2: command not found)

Freesurfer

* <https://surfer.nmr.mgh.harvard.edu/fswiki/FreeSurferWiki>
* General instru for windows <https://surfer.nmr.mgh.harvard.edu/fswiki/WindowsSupport>
  + Instru to install WSL and UBUNTU <https://docs.microsoft.com/en-us/windows/wsl/install>
  + Instru to install Xming <http://christopher5106.github.io/admin/2018/02/02/configure-windows-10-for-ubuntu.html>
  + Video to install freesurfer <https://surfer.nmr.mgh.harvard.edu/fswiki/DownloadAndInstall?action=AttachFile&do=get&target=installFS_demo.mp4>

WSL access Ubuntu files

* C:\Users\install\AppData\Local\Packages\CanonicalGroupLimited.Ubuntu20.04onWindows\_79rhkp1fndgsc\LocalState\rootfs

Example of optseq search

* + ./optseq2 --ntp 160 --tr 2 --psdwin 0 12 2 --ev disgustingPic 2 20 --ev attractivePic 2 15 --ev neutalPic 2 30 --evc 1 -1 0 --nkeep 3 --o IAPS --tnullmin 2 --tnullmax 8 --nsearch 1000
* Close to decision phase
  + ./optseq2 --ntp 29 --tr 2.8 --psdwin 0 11.2 2.8 --ev PR 1.5 1 --ev PnR 1.5 1 --ev nPR 1.5 1 --ev nPnR 1.5 1 --evc .5 .5 -.5 -.5 --nkeep 3 --o decphase --tnullmin .5 --tnullmax 10 --nsearch 1000
* psdmax and stimtime+tnullmin must be TR multiple

./optseq2 --ntp 26 --tr 2.8 --psdwin 0 11.2 2.8 --ev PR 2.5 4 --ev PnR 2.5 4 --ev nPR 2.5 4 --ev nPnR 2.5 4 --evc .5 .5 -.5 -.5 --nkeep 3 --o decphase --tnullmin .3 --tnullmax 10 --nsearch 20000

Maybe possible to use an updated version of neuropowertool

* <https://github.com/neuropower/neurodesign/issues/10>
* <https://github.com/amazinger13/neurodesign.git>.
* git install
* git+ https://github.com/PeerHerholz/neurodesign.git

correcting p2 code

* <https://stackoverflow.com/questions/18897511/how-to-drawimage-a-matplotlib-figure-in-a-reportlab-canvas>

on matlab, one can use optimizex

* <https://www.bobspunt.com/easy-optimize-x/>

4 best 16 trials seq with neurodesign

* Orderlist=[[1, 3, 0, 0, 2, 2, 2, 0, 3, 3, 1, 1, 1, 3, 0, 2],
* [1, 3, 0, 0, 2, 2, 2, 0, 3, 3, 1, 1, 0, 1, 2, 3],
* [0, 3, 1, 0, 2, 2, 2, 0, 3, 3, 1, 1, 0, 1, 2, 3],
* [0, 3, 1, 0, 2, 2, 2, 0, 3, 3, 1, 1, 2, 3, 0, 1]]

Example option of random combi of those

* [3,2,2,2,1,1,1,2,2,2,3,3,3,2,2,1,0,3,1,0,2,2,2,0,3,3,1,1,2,3,0,1,5,7,7,7,6,6,6,7,7,7,5,5,7,5,6,7,5,7,7,7,6,6,6,7,7,7,5,5,7,5,6,7]
* [1,3,3,3,2,2,2,3,3,3,1,1,3,1,2,3,3,2,2,2,1,1,1,2,2,2,3,3,3,2,2,1,2,1,1,1,3,3,3,1,1,1,2,2,1,2,3,1,2,2,3,2,1,1,1,2,2,2,3,3,1,2,2,3]
* [1,3,0,0,2,2,2,0,3,3,1,1,1,3,0,2,
* 3,3,1,0,2,2,2,0,3,3,1,1,0,2,2,1,0,
* 3,0,0,2,2,2,0,3,3,1,1,2,3,0,1,1,3,0,0,2,2,2,0,3,3,1,1,0,1,1,3]

Options for PRE

* [0. , 1.68, 1.68, 1.68, 4.76, 1.68, 3.36, 1.96, 1.96, 1.4 , 2.24,
* 3.08, 3.08, 3.64, 1.96, 2.52, 1.68, 2.52, 3.64, 1.96, 1.96, 2.8 ,
* 1.96, 1.68, 1.68, 1.96, 1.4 , 2.24, 2.52, 2.52, 2.52, 1.68, 2.24,
* 2.52, 1.4 , 3.92, 1.96, 2.24, 1.68, 3.92, 2.24, 2.52, 1.68, 1.68,
* 2.52, 1.68, 3.64, 2.52, 1.68, 3.08, 1.96, 2.24, 1.96, 1.96, 1.68,
* 1.96, 1.68, 3.92, 1.68, 1.68, 1.96, 3.64, 2.24, 1.4 , 4.48, 1.96,
* 1.96, 2.24, 1.68, 1.96, 5.88, 1.4 , 2.24, 1.68, 1.4 , 2.52, 1.68,
* 1.68, 3.92, 3.08, 1.68, 2.24, 1.68, 1.4 , 3.08, 1.96, 3.08, 1.96,
* 3.36, 1.68, 1.68, 3.36, 3.08, 1.96, 4.48, 1.68, 3.64, 1.96, 2.8 ,
* 2.52, 1.68, 2.8 , 3.92, 2.24, 1.68, 1.68, 1.68, 1.4 , 4.76, 2.8 ,
* 1.68, 1.68, 2.24, 1.68, 3.08, 1.68, 3.08, 2.24, 4.48, 3.36]
* [4, 0, 2, 2, 3, 3, 0, 0, 1, 1, 4, 4, 3, 3, 2, 2, 4, 0, 1, 1, 2, 4, 0, 0, 3, 3, 1, 1, 2, 2, 0, 3, 4, 4, 0, 1, 1, 4, 3, 2, 2, 2, 4, 4, 0, 0, 2, 2, 3, 3, 1, 1, 0, 0, 4, 3, 3, 4, 1, 1, 2, 4, 0, 0, 3, 3, 1, 1, 2, 2, 0, 3, 4, 4, 0, 1, 1, 4, 3, 2, 2, 3, 0, 0, 1, 1, 3, 3, 4, 4, 2, 2, 1, 1, 0, 0, 2, 3, 4, 4, 4, 0, 2, 2, 3, 3, 0, 0, 1, 1, 4, 4, 3, 3, 2, 2, 4, 0, 1, 1]