

Searching for articles on Pubmed (www.pubmed.com) or Google Scholar (scholar.google.com)

1. Search by topic:

Topic/keyword	Number of hits in Pubmed (articles by date)	Number of hits in Google Scholar (articles by popularity)
HIV	210124	2.760.000
HIV associated dementia	1345	21500
HIV associated dementia and glia	217	4500
HIV associated dementia and microglia	171	3410
HIV associated dementia and microglia and neurodegeneration	19	1300
HIV associated dementia and microglia and TNF	20 (does not include Bezzi et al!!)	1670 (includes Bezzi et al:2 nd hit)
HIV associated dementia and microglia and review	68	2050

2. Search by author (both in Pubmed and Google Scholar): To see other papers published by the same research group, choose the last/corresponding author

Last name (space) First and Middle Initials separated by a comma or “and”

Hains BC, Waxman SG OR Hains BC and Waxman SG

3. Search for articles at the journal’s home page

a. For original research articles:

Science: www.sciencemag.org

Nature: www.nature.com

Nature Neuroscience : www.nature.com/neuro

Neuron: www.neuron.org

Glia: <http://www3.interscience.wiley.com/cgi-bin/jhome/37090>

Journal of Neuroscience: www.jneurosci.org

PNAS: www.pnas.org

b. For neuroscience related reviews: Check the dates on the reviews/articles, try to pick the most up-to-date review.

Nature Reviews Neuroscience: www.nature.com/nrn

Trends in Neuroscience (for reviews): www.sciencedirect.com/science/journal/01662236

Neuron: www.neuron.org

c. Other journals of noteworthy: Cell, Molecular Cell, Current Biology, all sister Nature journals, Journal of Biochemistry

Suggested topics for Assignment 2:

1. The role of olfactory ensheathing cells in spinal cord injury repair
2. The role of astrocytes in the neuropathology of motor neuron disease ALS
3. GFAP mutations in Alexander's Disease
4. The role of astrocytes in blood-brain-barrier (BBB) formation
5. Energy metabolism regulated by astrocytes (lactate formation in neurons)
6. Learning and memory in astrocyte-deficient mice
7. ApoE production of astrocytes and clearance of amyloid plaques in Alzheimer's Disease
8. Propagation of migraine by astrocytes
9. Relationship between myelination and depression
10. The role of fractalkine released by microglia during neuropathic pain
11. You can also choose a topic among the papers we discussed and search for follow-up/similar papers within the field (either by the same group or by other groups) :

Epilepsy and astrocytes

Myelin inhibitors, other Nogo KOs by the same groups

Therapeutic developments against gliomas\Schwannomas

Microglia in aging/Alzheimer's/Huntington's/Multiple Sclerosis/Parkinson's

Presentations should include:

1. Title slide
2. 2-3 slides of background (what is known in the field? Anatomy, history, signaling pathways)
3. 1-2 slides of rationale and hypothesis (why do we care about the subject?)
4. key experiments and controls (what are the important experiments, and what are their findings?). Number of slides depends on the number of figures. You don't have to show every single figure; instead, you can mention some of the less important ones (i.e. the detailed techniques of gene cloning/ deletion, etc). I would rather you discuss the most important figures and explain the rest of the class why those experiments are groundbreaking/interesting/conclusive
5. 1 slide of conclusion (main points of the paper summarized) or a model based on the results of the experiments.
6. 1-2 slides describing problems in the paper/ questions not answered/ future experiments.

Inserting pictures into powerpoint:

1. Go to the article's website. Open the fulltext-html format of the paper (NOT the pdf format). Click on the figure of interest to visualize it in higher magnification. Then right click the picture, and select 'save as' to save your file in any picture format you like (choose the recommended option). Then open powerpoint, go to insert → picture → From file and select the picture you saved from your folder.