

## RESEARCH POSITION IN CELL BIOLOGY

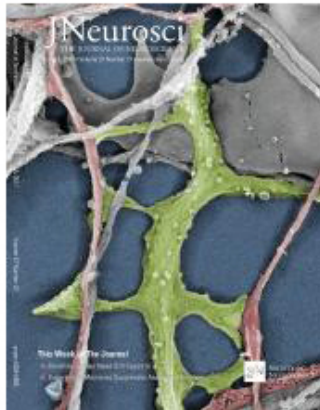
The SVITKINA laboratory at  
the UNIVERSITY OF PENNSYLVANIA  
is looking for motivated POSTDOCTORAL RESEARCHERS to study  
THE CYTOSKELETON – the main force generating machinery in the cell.

**Current projects:** (1) Actin-microtubule cross-talk in neuronal migration;  
(2) Functions of nonmuscle myosin II in cell motility

Our lab has unique expertise in studying the cytoskeleton by platinum replica electron microscopy (PREM). This method generates stunning views of the cytoskeleton inside cells with exquisite details revealing how individual cytoskeletal filaments form their force-generating “devices” for many purposes. Moreover, by combining PREM with live cell imaging we obtain unprecedented insights into the mechanisms by which the cell works.

**Interested applicants** should send their CV, list of publications and names of 2-3 references to: Dr. Tanya Svitkina: ([svitkina@sas.upenn.edu](mailto:svitkina@sas.upenn.edu)). Motivated candidates at other levels of education can also be considered for the position.

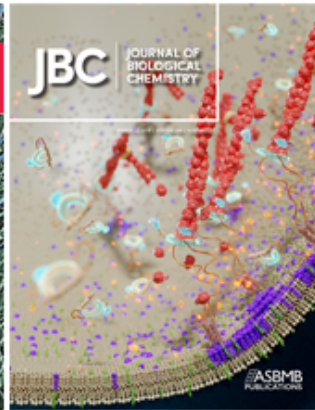
**Recent publications** (full list can be found at [https://www.ncbi.nlm.nih.gov/pubmed/?term=svitkina+\\*](https://www.ncbi.nlm.nih.gov/pubmed/?term=svitkina+*)):



Efimova et al. 2017.  $\beta$ III spectrin is necessary for formation of the constricted neck of dendritic spines and regulation of synaptic activity in neurons. *J Neurosci*. 37:6442-6459.



Efimova, N., and T.M. Svitkina. 2018. Branched actin networks push against each other at adherens junctions to maintain cell-cell adhesion. *J Cell Biol*. 217:1827-1845.



Bucki et al. 2019. Lateral distribution of PI (4,5) P2 in membranes regulates formin- and ARP2/3-mediated actin nucleation. *J Biol Chem*. 294:4704-4722.



Yang, C., and T.M. Svitkina. 2019. Ultrastructure and dynamics of the actin-myosin II cytoskeleton during mitochondrial fission. *Nat Cell Biol*. 21:603-613.