contention for years, as salaries have remained low and haven't kept up with inflation and postdoc terms have increased in length and number. The National Academy of Sciences has suggested that the postdoc salary be raised to a minimum of $50,000 so this new law brings the minimum postdoc salary significantly closer to that number (in 2016, minimum NIH salary was $43,692).

So what does this mean for postdocs? A recent survey done by the Council on Government Relations (CoGR) found that most institutes (75%) are raising their postdoc minimum salaries to $47,476, as this comes with less administrative burden of keeping track of hours, but a minority of institutes (25%) are not creating institute-wide policy (this means salary can remain below $47,476 but postdocs cannot work overtime unless they are compensated for it). At Mount Sinai, new policy states that postdocs must be paid a minimum of $50,000 as of December 1, 2016 with raises after 2 years of experience ($50,000 for years 0-2, $51,316 at year 3, $52,140 at year 4, $54,228 at year 5, $56,400 at year 6, and $58,560 for years 7+).

While this raise in postdoc salary will likely affect research budgets, the director of the NIH and secretary of the DOL said in a joint statement that they are “fully supportive” of raising postdoc pay and “confident the transition can be made in a way that does not harm—and actually serves to enrich—the future of our research enterprise.” The same CoGR survey described above found that over 70% of institutes will have the primary investigator responsible for the increase in postdoc salary with only 13% of institutes providing a pool of funds to help compensate for this increase. The NIH and DOL plan to work with researchers to ensure a smooth transition; however, many are worried that the additional cost to research budgets will result in a reduction in the number of postdocs. The popular blog Drugmonkey wrote that this new law “will take away jobs” and predicts that “fewer postdocs will be hired. Whether this is good or bad … well, opinions vary. But the math is unmistakable.” With leaders in the research community calling for a reduction in the number (and length) of postdocs, one can’t help but wonder if the two are related.

With the high cost of living in NYC, this raise in salary is long overdue for postdocs and the Postdoc Executive Committee at Mount Sinai is thrilled with the response by the leadership from the Mount Sinai Graduate School to not just meet but to exceed the FLSA minimum set by the DOL.
The initial phases of one's life are crucial, particularly for brain development. Experts in the field believe that there is a critical window during which the brain starts to grow and develop, and this growth is proportional to the number of stimuli the brain receives. At around 2-4 years of age, a child has already completed his or her initial phase of “brain growth” and, even at this early age, the critical window for proper brain development will slowly start shrinking. For this reason, experts in the field believe that children's brains need to be stimulated even before school-age otherwise the central nervous system may not fully develop its mnemonic and learning capabilities. Various activities, including picture books and fairytales, are helpful to develop a child's potential. This type of memory is called ‘declarative memory’ and includes facts and events, specifically those memories that can be consciously recalled (it is often also referred to as ‘explicit memory’). Exposing children to stories and events, and encouraging them to report back and describe them, helps develop this specific type of memory. Until 4 years of age, all experiences are rapidly forgotten, making declarative memory a paradox: the phase during which the brain learns to remember corresponds to the phase for which adults have few or no memories. This phenomenon is called “infantile amnesia” and could be explained in multiple ways. First, scientists believe that it may be related to hippocampal inability to form memories because this area of the brain, crucial for long-term memory formation, is not yet mature during the first years of life. Second, it could be due to neurogenesis, which is a process by which new neurons and synapses are generated from neural stem and progenitor cells. Lastly, infantile amnesia could be due to failure in memory retrieval, which is the process through which we can re-access a memory previously encoded and stored in the brain. In support of this last hypothesis, there are several studies in human and animal models showing that reminders of an early experience can reinstat a memory acquired during infancy.

Researchers at NYU and Mount Sinai showed that the acquisition and storage of an episodic aversive memory during the infantile amnesia period requires intact hippocampal mechanisms - if a certain memory acquired during the infantile amnesic phase is solicited or recalled during adulthood (i.e. by presenting cues associated with that memory), the memory for that experience comes back and remains as a strong, specific, and long-term memory for that event. This study also showed that the hippocampus is functioning normally during the infantile period and, if properly activated and stimulated, the future memory capacity or memory skills of an individual will be stronger. Similar to what happens with linguistic function, as receptivity to language and the ability to learn multiple languages is greater during the first several years of life, mnemonic function is particularly flexible and ‘receptive’ during the first 2-4 years of life because proper central nervous system maturation is guided by environmental factors so brain plasticity is at a maximum. This study was published in August 2016 in Nature Neuroscience: http://www.nature.com/neuro/journal/v19/n9/abs/nn.4348.html.

Dr. Alessio Travaglia, PhD (NYU) is the lead author of the study.
Greetings fellow postdocs,

The autumn is often synonymous with back to school and this time continues to be a productive period for career development for postdocs. Hopefully many of you joined us for the 7th Annual Postdoc Symposium in September, and October is also filled with postdoc career development opportunities, with the last of a series of three workshops on “Strategies and tactics for preparing postdoctoral fellowship applications” and with the kick-off of the brand new “Future Leaders in Project Management” short course. The last week of October will also hold the SINAIInnovations and SINAIInnovations trainee forum events.

SINAIInnovations will take place on October 25th and 26th. Keynote speakers will include Dr. Karl Deisseroth from Stanford University, Dr. Manolis Kellis from Massachusetts Institute of Technology Broad Institute, Dr. George Church from Harvard Medical School and Massachusetts Institute of Technology and Dr. Drew M. Pardoll from Johns Hopkins School of Medicine. The line-up for the SINAIInnovations trainee forum is also outstanding. The first concurrent case study will feature Dean Charney, Dr. Eric J. Nestler and Dr. Darryle Schoepp (Merck & Co) on drug discovery in depression. The second case study, with Dr. Ana Fernandez-Sesma, Dr. Gail Shust and Dr. Neil Stahl (Regeneron Pharmaceuticals), will discuss vaccine development for the Zika virus. The third case study, with Dr. Alan Belicha and Dr. Nolan Skop, will provide concrete examples of research commercialization at Mount Sinai. At the second edition of the Young Innovators Pitch Competition, the teams (AVAC, Edema Sock and the Multis) will pitch their medical devices and compete in front of four judges from venture capital firms. Dr. Sean Ianchulev will give the keynote presentation “Innovation Through the Eyes of an I-Doctor”. Dr. Ianchulev’s inventions have impacted millions of patients in the field of ophthalmology, and he played key roles (Technology Founder, Chief Medical Officer, and Head of Research and Development) in two companies that were later acquired by Alcon/Novartis. Sign up for the trainee forum!

Finally, I would like to mention that the Postdoc Executive Committee (PEC) is about to launch a campaign to increase the visibility of the Mount Sinai postdoc community. Each month, we will feature a recent publication led by a Mount Sinai postdoc. The postdoc would be featured in the PEC social media and alumni newsletter. If you would like to submit your publication or nominate your colleague’s publication, please email the link to the publication with a brief description to ISMMSpostdoc@gmail.com.

Best,
Geneviève

Geneviève Galarneau and Delaine Chelski are your PEC co-chairs

Ways to keep in touch
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