It has become our routine, dictated by New York City character and increasing competition, to juggle multiple projects at the same time. Whether it is research, community work, or personal life, we want to be good at everything. Like many of you, I sometimes feel like I am in a children’s game in which hens sit on shelves and lay eggs that roll down and fall, while a wolf is trying to catch them one by one into a basket. In this game, I am the wolf and the eggs are my goals and deadlines. However, this constant egg juggling is actually bad for us.

A new but neglected idea is the importance of taking breaks during times of sustained effort. In an article published in the New York Times, Dr. John P. Trougakos, an assistant professor of management at the University of Toronto Scarborough and the Rotman School of Management, reminds us that “mental concentration is similar to a muscle [that] becomes fatigued after sustained use and needs a rest period before it can recover”. Dr. James A. Levine, an endocrinologist and professor of medicine at the Mayo Clinic, points out that lipid and sugar levels increase in the blood stream during extended periods of work. While Dr. Trougakos suggests active breaks and Dr. Levine suggests short naps, both emphasize that if we don’t alternate work and rest, we are burning all systems down.

However, I am too anxious to get all the work done - I want the paper published yesterday not tomorrow! So here is how I think it can work (this is my New Year’s resolution):

1. Set goals (e.g. papers, grants, a new job)
2. Check deadlines ahead of time
3. Schedule actions (write it on the calendar)
4. Mark the times for alternating spurts and breaks (or “walk”, “run”, “sprint” and “rest”, whatever your rhythm is)
5. Get the ball rolling on projects early

Keep in mind that the benefit of breaks is to make us more productive and healthy. So if you live near Mount Sinai, consider leaving for an hour and taking a nap. If not, take the mile walk through Mount Sinai or around the reservoir in Central park, and after the anxiety from wasting your precious time has passed, your relaxed mind will become open to new ideas. We all enjoy what we are doing - we just have to find our rhythm and be conscious of both our work AND our health.

Cataracts and misbehaviors in the protein-folding universe

By Alaa Abdine

Cataracts remain the leading cause of blindness in the world, and are caused by fibril accumulation in the lens of the eye. As in other protein misfolding diseases, such as Parkinson’s or Alzheimer’s, cataracts are a disease of ageing. They reduce vision in 50% of individuals over 70 years old and are triggered by the aggregation of crucial proteins, known as crystallins.

“Shortly after you’re born, all the fiber cells in the eye lose the ability to make new proteins, or to discard old proteins,” says Dr. Jason Gestwicki, Associate Professor at UCSF and author of a paper recently published in Science which introduces a new approach to treating cataracts by solubilizing the aggregated fibrils or amyloids. Lenses use this permanent reservoir of crystallins to maintain the transparency and flexibility of fiber cells, as eye muscles constantly stretch and relax the lens, allowing it to focus on objects at different distances. So far, state-of-the-art of medicine allows only an understanding of the mechanisms that lead to aggregate formation, and once the misfolding has occurred, little is known about how to treat or reverse the mechanism.

Earlier this year, Dr. Gestwicki and his collaborators excitingly showed that sterols, among over 2000 compounds tested, were able to stabilize crystallins in their soluble form. However, because sterols are highly hydrophobic and thus not an ideal candidate for injection into the lens, they subsequently screened for new compounds similar to sterols, but with a higher solubility in water. This led to the discovery of a new compound which “partially suppressed any amyloid formation in vitro”. The compound was also tested in an eye-drop formulation in cataract susceptible mice, where it showed promising effects. Dr. Leah Makley, an ex-postdoctoral researcher in Dr. Gestwicki’s lab who conducted this study, has since founded a biotechnology company called ViewPoint Therapeutics, which aims to test the compound on cataract patients.

The discovery of this compound is important not only for the treatment of cataracts, but for the general understanding of the mechanisms of amyloid formation and reversal of molecular aggregates previously labeled as “undruggable” targets.
At the end of 2015, I started a blog. Not because I had anything in particular to blog about, or have good computer skills, or enjoyed social media. In fact none of those things were true until I started blogging. I wanted a blog purely to know that I could create something I never thought I could. Actually in the end it was much simpler than I imagined. Here are a few key points of what I learnt along the way:

1. You can blog for free through websites such as Wordpress, or pay a small monthly fee for a hosting site such as Bluehost (which uses Wordpress as the blogging platform). What is the difference? Using Wordpress is free (since I was just trying it out to see if I liked blogging, I went with this option); however, you have no control over advertising on your blog and cannot earn revenue. If that’s not something you care about, the free option is the way to go.

2. With Wordpress it takes 4 quick and easy steps to create a blog:
   - Choose a theme (the basic look or design of your blog)
   - Choose a domain name (whateveryouwant.wordpress.com)
   - Choose a plan (the free plan is one option and the easiest for beginners)
   - Create an account (by entering an email and password)

   Now you have a website/blog - it’s that easy!

3. Once you log in to Wordpress you are now in the ‘backend’ of your blog (essentially behind the scenes where you do the creating). The ‘frontend’ of your blog is the finished product that everyone else sees. In the backend you use your ‘dashboard’ to create pages on your website and blog posts. The home page of your website is automatically where new blog posts appear (unless you specifically create a static home page). You can also have other static pages such as an ‘about me’ page or ‘gallery’ page for images.

4. Creating a blog post. This is as easy as clicking ‘new post.’ Here you can type text, insert media (photos or videos), and perform many other functions. This won’t appear on your blog until you are finished and click ‘publish.’ Now your post will appear on your site for everyone to see. At any time you can edit previous posts, even once published.

5. So now you have a blog, which means nothing unless people see it. How do you get blog traffic? The best way is to visit other blogs. Find blogs with similar interests to yours and leave an encouraging and substantive comment on someone else’s post and follow their blog. They will see your comment, check out your blog and hopefully follow it too. Wordpress also offers free online courses such as Bloggin101 where you meet lots of other new bloggers and get daily mini assignments to improve your own blog.

6. Search engine optimization (SEO). SEO is designed so that in the backend of your blog you can add things like ‘tags’ to make your images and posts appear on search engines such as Google. Tags are just words which you think would be appropriate search terms to describe your picture or post. For example, with the image below my tags are tree, colorful, autumn, orange, red, nature, painting, and art.

7. Finally, the biggest advice I can give is to blog about something you are passionate about. Regular blogging is key so that readers know what to expect, and it’s hard to stay motivated to do something that often feels like a chore. It should be something you enjoy.

Feel free to visit my blog (lauralecce.com), and/or email me with any questions you may have on the way to creating your very own blog (lauralecce13@gmail.com). Happy blogging!

**UPCOMING EVENTS**

- **Office of Career Services & Strategy** presents “Acing it: Successfully Navigating the ACADEMIC Interview Process” by Prof. Jean Lim, PhD on Tuesday, January 19 from 4-5 pm (Annen 15-65). To RSVP: https://www.surveymonkey.com/r/YT6CYGX.

- **Career Development Seminar Series**: “Update on NIH investigator-initiated grant proposals: Writing for the Reviewers in the Current Funding Climate” by Israel Goldberg, PhD on Wednesday, January 20 from 2-5 pm (Goldwurm Auditorium at Sinai). Email Theresa.Scarabino@mssm.edu if you have questions.

- **WiSM** presents Dr. Susan Solomon of the New York Stem Cell Foundation presenting “Actionable Strategies for Advancing Women in Science, Engineering, and Medicine” on Wednesday, January 20 from 4:30-6:30pm in the Hatch Auditorium. To RSVP: https://www.surveymonkey.com/r/SusanSolomon.

- **Next Postdoc Social** is Friday, January 29 at 5 pm in the Icahn MC Alcove. Come for food and drinks!

- **Science Communication Seminar**: “What Accounts for Success?” by Kathy F. Bernhard of KFB Leadership solution on Monday, February 8 from 4-5:30 pm (Annen25-51).
Word Search
Topic: Dinosaurs

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
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Word List:
- ALLOSAUR
- CRYPTOClidus
- JURASSIC
- STEGOSAURUS
- ANKYLOSAURUS
- DIPLODOCUS
- Koolasuchus
- TYRANNOSAURUS
- BRACHIOSAURUS
- EORAPTOR
- ORNITHOLESTES
- CRETACEOUS
- IBEROMESORNIS
- Rhamphorhynchus

Answer Key

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