National Postdoc Appreciation Week is coming up and as a way of celebrating the accomplishments of our postdoctoral community, the PGA and the PGS AO are hosting the 9th Annual DFCI Postdoc and Grad Student Retreat. This year’s retreat will be held at the Dante Alighieri Cultural Center near Kendall Square, Cambridge, MA on Friday, September 20, 2013 from 8:30 a.m. to 4:30 p.m.

We have planned an exciting program of events, including a Keynote Address from Dr. William Sellers, Global Head of Oncology at the Novartis Institutes for BioMedical Research. Dr. Sellers is a postdoc alum from DFCI and a former DFCI faculty member. We will also showcase research carried out by DFCI postdocs and graduate students through oral and poster sessions, so please send in your abstracts as soon as possible (NOTE: this year’s submission deadline is September 6). Four outstanding abstracts will be chosen for oral presentations and $1,000 prizes will be awarded to the two best oral and two best poster presenters. While you enjoy a delicious, Italian-themed lunch, take advantage of the opportunity to network with other postdocs, graduate students, and administrators. We will announce the recipient of the 2013 Mentor-of-the-Year Award and give away raffle prizes during the cocktail reception, which will be hosted by DFCI’s Chief Scientific Officer, Dr. Barrett Rollins.

For this year’s Professional Development Session, we are running a panel discussion on alternative bioscience careers. Panelists include Dr. Christine Brennan, Chief Business Officer at Vitae Pharmaceuticals; Dr. Erin Whalen, Lab Head of Cell Pharmacology at Novartis; Dr. Maureen Lane, Director of the Clinical/Translational Core Laboratory at Weill Cornell Medical College; Dr. Cyrus Martin, Senior Editor of Current Biology at Cell Press; and Dr. Melissa Hunter-Ensor, Partner at Saul Ewing LLP. Our panelists are experienced in diverse fields such as business development, consulting, intellectual property, scientific writing and publishing, as well as traditional and non-traditional paths in academia. All our panelists were former postdocs and can tailor their discussion to our specific experience. The panel will be moderated by Lauren Celano, Chief Executive Officer at Propel Careers, a Boston-based career development firm.

The street address for the Dante Alighieri Cultural Center is 41 Hampshire Street, Cambridge, MA. To facilitate your commute to the venue, we have reserved 20 free parking spots at the One Kendall Square Garage at 355 Binney Street, located one block away from the Center; please email dfci_pgsao@dfci.harvard.edu for a parking pass if you plan to travel by car. The venue is also easily accessible by public transit. From Longwood Medical Area, you can reach the Center by taking the CT2 bus from the corner of Longwood Avenue and Binney Street; get off at the first stop immediately after Kendall Station, and the Center is directly across the street. You can also take the Red Line to Kendall Station, which is a 12-minute walk from the venue.

As always, the retreat is free and all postdocs and graduate students are encouraged to attend! Remember, although abstracts will only be accepted until Friday, September 6th, you still have until Friday, September 13th to register. More information can be found on the retreat Intranet site at http://dfcionline.org/departments/pgsao/pga/retreat/default.aspx.

Where @ DFCI?

Do you know where this is? Send your answer to dfci_pgapost@dfci.harvard.edu The first 2 people with the correct answer will receive a $5 gift card!
to file because your invention is already in the public domain.

What exactly is public disclosure of information?

For patent purposes, public disclosure of information is really any disclosure that is accessible to the masses, whether those people are your parents or a colleague in the field. For example, anything in writing may constitute public disclosure, including news releases, online publications, poster presentations, abstracts or proceedings that are published in connection with a conference presentation, theses, and any journal publication (online or in print).

Public disclosure of information can also be verbal, such as talking about your data during a job interview or a seminar talk. Importantly, discussions within Dana-Farber (i.e., at lab meetings or retreats) and discussions with collaborators do not count as public disclosure of information.

How about grant applications?

Submission and review of grants (and papers) are not considered public disclosure. However, publication (online or in print) does constitute public disclosure. Recently there has been a trend for foundations and granting institutions to publish proposal abstracts and/or progress reports online – this is something to watch out for, as it would constitute public disclosure. If there is an option to mark your application/report as confidential or to withhold publica-
tion, you should elect to do so. If you are concerned that something in your grant may become public, please contact me (erica_lore@dfc.harvard.edu) or the Office of Research and Technology Ventures (ortv@dfc.harvard.edu) to discuss how to maintain confidentiality.

Is it possible to structure an abstract so that it is not a public disclosure?

It depends on the invention. If you have discovered a target, then the name of the target gives it away. But if you are thinking about an idea or a specific sequence, you can be vague enough and omit specific details such that it does not constitute public disclosure.

What if I just published something that I think might be patentable?

In the US, there is a one-year grace period during which you can file a patent application to protect your invention after it has been publicly disclosed.

How do I know whether my research is patentable?

Even in light of the recent Supreme Court decisions, the majority of research done at DFCI can be considered patentable. One caveat is that while the elucidation of mechanisms and pathways is scientifically critical, patent offices are more interested in causes and effects. For example, if you create an antibody or small molecule, it usually does not matter how it works, but rather what it does.

What types of patents have you filed recently?

We’ve filed applications on biomarkers, targets, screens, gene signatures, diagnostics, assays, compounds, vaccines, software, algorithms, methods of making/using/treating, and devices, just to name a few!

Are there any types of inventions that you usually don’t patent?

Yes, we generally don’t file patent applications on inventions that we consider to be know-how or research reagents, like cell lines or mouse models – items that have a value because buying them is more cost effective than making them yourself. Importantly, these items are licensable, so it’s still a good idea to disclose them to the ORTV.

Why would I want to patent or license an invention? Is there any advantage for me?

Actually, the lab, the PI, and the inventors (including postdocs) all get a cut of the revenue generated by a license. DFCI’s official policy on royalty sharing can be found in Section 5.2 of the Research Policy and Procedure Manual, available on the Intranet at http://dfcionline.org/research/researchoffices/researchpolicyandproceduremanual.

Beyond the personal financial benefits, technology commercialization can also have a profound impact on society by creating new
The H-Index: A Truer Measure of Scientific Quality?

In the previous issue, we published our thoughts about the strengths and weaknesses of the impact factor as an indicator for assessing, at least in part, the quality of a scientist. Continuing on this hot topic, there are other indexes that we can use to analyze our scientific performance.

In 2005, Jorge E. Hirsch\(^1\) proposed a new standard, which he defined as follows: “A scientist has index \( h \) if \( h \) of his/her \( N_h \) (total number) papers have at least \( h \) citations each, and the other \( N_{h-h} \) papers have no more than \( h \) citations each.” The Hirsch index (\( h \)-index) is a criterion that measures the cumulative impact and productivity of a researcher within the scientific community based on the number of times his/her publications have been cited. The greatest advantage of the \( h \)-index is that it reflects the quantity as well as the quality of scientific work.

While all other single-number criteria, such as the total number of publications or total number of citations, tend to give a one-dimensional approximation (and sometimes a false assessment) of the researcher’s output, the \( h \)-index has multiple positive aspects. It relies on citations of individual papers, not journals; it can be used to compare scientists within a field at similar stages in their careers; and finally, it cannot be distorted by a single well-cited and influential paper.

As such, the \( h \)-index has become increasingly popular and accepted in scientific circles, and serves as a valid way to compare the academic achievements of researchers who are competing for funding opportunities. Interestingly, successful applicants for post-doctoral fellowships have on average a higher \( h \)-index compared to non-successful applicants\(^2\).

If reading this article has motivated you to check your own \( h \)-index, here is a link to help you calculate it:


A Trip Down Memory Lane - Highlights from Past Issues

In July, the PGA Post celebrated its 3rd anniversary, and we are proud to announce that our circulation has expanded to 500 copies per quarter! For those readers that have recently joined us, the newsletter staff would like to take a moment to reflect on the wide variety of topics that we have reported on in the past 11 issues.

The front page of the PGA Post included coverage of:

- annual PGA retreats
- Industry Exploration Program (IEP)
- Mentor-of-the-Year Award
- RCR training at DFCI
- LinkedIn subgroups

Many of our postdocs are interested in pursuing a career in academia or industry. To provide insights into different career paths, the second page of each issue featured interviews with diverse DFCI faculty, staff, and alumni such as:

- Benjamin Haibe-Kains
- Dimitrios Iliopoulos
- Laurie Regan
- Madathia Sarkissian
- Marc Lafleur
- Stacey Ruiz
- William Hahn
- William Sellers

On the third page of the newsletter, we highlighted practical information for postdocs and grad students, including:

- biking to work
- childcare options
- commuting after dark
- food nearby DFCI
- impact factor
- mentoring tips from James Griffin
- networking through ResearchGate
- NIH K series awards
- peer review
- recycling at DFCI
- saving for retirement
- science apps for smartphones
- science writing
- staying fit
- volunteering at DFCI

Finally, the last page of the PGA Post showcased an array of useful and entertaining topics, such as:

**Cores & Resources**

- Center for Cancer Computational Biology (CCCB)
- humanized mouse models
- RNAi facility

**Fun Facts**

- Curiosity Corner (unusual new science publications)
- Ig Nobel prizes
- #overlyhonestmethods
- recipes

**Practical Information**

- career development resources
- dealing with failure
- getting a Harvard ID
- PGSAO editing services
- visas & travel

For a complete index of the article topics that can be found in previous issues, check out our Intranet site:

http://dfcionline.org/departments/pgsao/pag/post/

---

**Editorial Team**

Hilary Eaton  
Reina Improg  
Sandra Ljubicic  
Monica Ter-Minassian  
Robert Kochler

Special thanks to Jennifer Molina and Sonal Jhaveri. If you are interested in contributing to the PGA Newsletter, email us at dfci_pgapost@dfci.harvard.edu. Comments and suggestions are also welcomed!
jobs, sparking industry collaborations, serving as an additional source of funding for your research, and providing a faster way to get new technologies to other scientists and ultimately to patients.

How do I initiate a conversation with ORTV about potential inventions related to my research?

The first step is to complete and submit the Dana-Farber Invention Disclosure Form, which can be found on the ORTV website at http://www.dana-farber.org/Research/Technology-Transfer.aspx#Invention Disclosure. Next, a case manager will contact you to discuss the invention and coordinate the review process. If you have any general questions or need clarification, please don’t hesitate to contact the ORTV by phone (617-632-2118) or by email (ortv@dfci.harvard.edu).

When should I start the ball rolling?

There is really no such thing as “too early”, because we can walk you through potential next steps for commercial possibilities and IP protection at any stage of your research. So come to us first! We never prevent people from publishing, and we’re always willing to work with you to seek out patent protection prior to any disclosure.

Q: How many postdocs does DFCI have, and how does this number break down by department?

A: DFCI currently has around 500 postdocs. Here is a snapshot of the number of postdocs in each department as of July 2013:

![Pie chart showing the distribution of postdocs across departments]

The Blind Shall See? The eye contains specialized photoreceptor cells called rods and cones that can be damaged or destroyed due to disease or age. Researchers at Moorfields Eye Hospital and University College London were able to successfully implant stem cells into the eyes of mice with impaired photoreception, resulting in an increase in light detection. This proof-of-concept study shows that someday it may be possible to restore vision in patients suffering from blindness or impaired eyesight. (Gonzalez-Cordero A et al. Nat Biotechnol. 2013 Jul 21.)

Microscopic Giants. The largest known virus was recently discovered in aquatic amoebae from Chile and Australia. The Pandoravirus is named for its similarity in shape to a Greek vase and for its potential surprises to virology. At 1 micrometer, it is almost the size of a bacterium, and it has a genome size of 2.5Mb with 2,500 genes—many times more genes than the 4 to 100 genes present in commonly known viruses. Related to other megaviruses, Pandoravirus may provide further evidence to support the evolutionary theory that viral genes were lost over time. (Philippe N et al. Science. 2013; 341:281-6.)