



**Boston  
Children's  
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**Postdoc  
Association**

**Newsletter**  
September 2018

## Career Paths : Patent Law

by Steven Swendeman,  
Ph.D.



Most of us have a binary view of our post-doc careers: academics or industry. But what if the ups and downs of bench work have lost its appeal and you feel that you are at a personal crossroads? There is a whole other world out there where the intensity of and knowledge gained from science training is looked upon as incredibly useful. There are **multiple alternate careers** where you can use all of your science training, your ability to think logically, and your talent to write scientifically: Science writing and editing, working in the science/pharmaceutical advertising/information industry, and the focus of this piece, **Intellectual Property Law** or **Patent Law**.

My wife, as well as several of our friends, had a very successful postdoc career, with first author papers from a very famous lab here at HMS. However, the thought of an academic career with 24/7 lab management, a constant demand to write grants while facing many possible rejections after months/years of work, and the overwhelming lack of family time made her think about alternate career paths. Ages ago she happened on an ad in the journal *Science for Patent Law*. At the time biologists were clueless about patenting our work, let alone the process of creating a patent.

For generations, patent law has been the realm of new technologies and new inventions. For decades, law firms hired organic chemists who could write a patent that allowed the pharmaceutical

industry to receive protection for their new small molecule compounds. In 1972, Herbert Boyer and Stanley Cohen changed the world by creating genetic engineering and suddenly the old models for patenting faced a brave new world, where the process of patentability of new inventions moved away from small molecular compounds and towards biologics.

When I was a grad student, biotechnology was in its infancy and there were 4 companies in Cambridge and the patent law field suddenly needed biologists who could redirect patents to biologically based agents. Fast-forward to today. There are ~300 small biotech companies around the Boston area not to mention all of the research labs both here at HMS and at all of the other big Institutions around Boston. There are dozens of law firms with Intellectual Property departments to cater to biotechs, big pharma, as well as private research equity groups. There is a demand for well-trained scientists.

To do this as a potential career, you have to enjoy science writing. The job is all writing. Many law firms will take you straight out of your PhD/post doc. Your first goal is to familiarize yourself with the Manual of Patent Examining Procedure: (<https://tinyurl.com/y98a7dvt>)

There is a governmental exam to become a patent agent, which means that you can deal directly with the US patent office and argue patent cases there even without a law degree. Once you pass the patent exam, you learn to write in the peculiar jargon that is patenting.

Typically, a patent is vaguely like writing a regular scientific paper: Abstract, Introduction, and Results. But instead of a discussion, there is something called Claims.

Claims define what is being invented by the data. New drugs, new platforms for screening drugs, the results from a big data set. And Claim writing is as much a scientific skill as it is almost an art form to be mastered, just like writing a great discussion to sell your paper to a high-impact journal. Google has a whole database of patents (<https://patents.google.com/>) if you want to familiarize yourself with the structures.

Most firms suggest/require that you eventually attend Law School. Many firms have programs to help you pay for attending. Some people just go straight to Law School, but at the same time, some law schools have night-school programs that take 4 years, and allow you to work during the day. If you are inclined in this direction, there are many benefits. Starting salaries are more than double what you are making now. If you show a talent, the salaries rise rapidly. If you go to law school, then they really escalate.

Once you are in this field, you can work your way up the chain at the law firm, similar to trying to get tenure. Alternatively, you can go "in house", which is moving to a company to handle patents and controlling what goes on at the outside law firm they hire. These jobs pay a little bit less, but at the same time they are usually 9-5 with no weekends.

A second job that is an offshoot of learning patent law is in offices of tech transfer. All of the major universities have huge patent portfolios that can be licensed to big pharma, biotech, or other universities. There is a need for both the science knowledge and the patent knowledge to generate money for the university. So, the bottom line: You can use your science knowledge and all of the logical approaches to thinking outside of the narrow academic/industry axis and have an applied science career.

To learn about the governmental patenting process, go to:  
<https://www.uspto.gov/>

## Postdoc Spotlight

Get to know a Boston Children's Hospital Postdoc. This month we speak with **Mrinmoy Das**.

### ***What lab do you work in?***

The Geha Lab in the Department of Immunology.

### ***How long have you been a postdoc at BCH?***

8 months

### ***Quick summary of your work?***

I am investigating the implication of Staphylococcus aureus colonization on the atopic dermatitis and subsequent on the atopic march.

### ***Other activities within the BCH community?***

I am a member of the PDA career development committee

### ***What do you do outside of work?***

I like to do photography. I also like swimming and running.

### ***Favorite things to do in Boston?***

I like to walk along the side of Charles River particularly at Esplanade area. I also enjoy relaxing in the Jamaica Pond or the Arboretum

### ***Favorite Boston bar/restaurant?***

One of my favorites is Lolita Fort Point

The BCH Postdoc community wants to know about you, so contact us at [postdoc-publicaffairs@childrens.harvard.edu](mailto:postdoc-publicaffairs@childrens.harvard.edu) to appear in the next newsletter!



## BCH Postdoc Achievements!

Fellows, to increase your visibility and to highlight your achievements, we decided to publish them in our quarterly newsletter and on social media. Congrats to the authors and awardees!

### Publications from BCH Postdocs

**Theo van den Broek**, M.C.Carroll lab – PCMM, “The full spectrum of human naive T cells” *Nature Rev. Immunology* 2018 and “Opinion: We Have Been Naive About Naive T Cells” *The Scientist* 2018

**Hadi Amiri**, Weitzman & Savova lab “Toward Large-scale and Multi-facet Analysis of First-person Alcohol Drinking” *AMIA* 2018

**Thomas Blair**, Michelson & Frelinger lab “Mass Cytometry Reveals Distinct Platelet Subtypes in Healthy Subjects and Novel Alterations in Surface Glycoproteins in Glanzmann Thrombasthenia” *Scientific Reports* 2018

and “Phosphoinositide 3-kinase p110 $\alpha$  negatively regulates thrombopoietin-mediated platelet activation and thrombus formation” *Cellular Signalling* 2018

### Awards to BCH Postdocs

**Aarti Sathyanarayana**, Mandl lab – CHIP, Honorable mention for the NCWIT Collegiate Award 2018

**Theo van den Broek**, M.C.Carroll lab, Marie Curie individual fellowship 2018

**Yuan Wang (Simon)**, Greer Lab, Croucher Post-doctoral Fellowship 2018-2020

**Thomas Blair**, Michelson & Frelinger lab, BCH PDA Travel Award – July 2018 round

**Arunoday Bhan**, Schlaeger lab, National Blood Foundation’s Early-Career Scientific Research Grant 2018-2020



Aarti, one of our award winners

Find out the links on our Facebook page and LinkedIn!

If you recently published or won an award and want to share it with us, contact us at [postdoc-publicaffairs@childrens.harvard.edu](mailto:postdoc-publicaffairs@childrens.harvard.edu) (provide your full name, lab, title and journal for publications and information on sponsor for awards).

## Travel Awards- July Round

And the winners are...

**Amar Majmundar**

**Mark Reglinski**

**Thomas Blair**

**Yanfei Wang**

Congratulations!



Next round of travel awards in the Fall, stay tuned!

## Postdoc opportunities via BCH

BCH is looking for new authors/science writers to publish in the science and clinical innovation blog <https://vector.childrenshospital.org/>

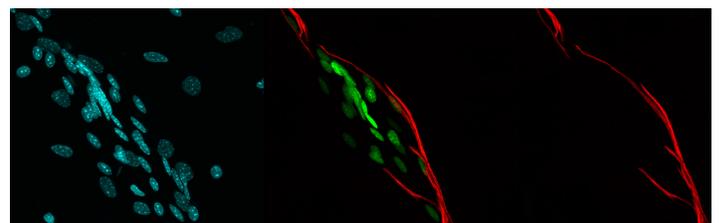
If you are interested, please contact Katherine McAlpine for more information

[katherine.mcalpine@childrens.harvard.edu](mailto:katherine.mcalpine@childrens.harvard.edu)

BCH communication is also looking for your best science shots!

Send your picture and caption to :

[katherine.mcalpine@childrens.harvard.edu](mailto:katherine.mcalpine@childrens.harvard.edu)



Mesenteric vessels isolated from S1PR1 - GFP reporter mice  
by Andreane Cartier, Hla lab

## Recent Events

### The Art of the Phone Interview, June 27



### Pub night, Aug 2 at The Puddingstone Tavern



### B-SoCCS, June 8-10

### Appreciation dinner, June 19

### Word Cup 2018, July 10

## Upcoming Events

### From Postdoc to PI, Sept 18, 3-4.30pm, CLS12 Conference Room

### National Postdoc Appreciation Week, Sept 23-27

--> [Check out the events](#) going on this week (Breakfast, short videos on BCH Postdocs...)

### Merck panel, Oct 3, 2-5pm

### 2nd Annual BCH Science Carnival

#### Leaving soon?

Send us your personal address at [postdoc@childrens.harvard.edu](mailto:postdoc@childrens.harvard.edu) to be register as BCH Alumni, get in touch with us and share your career paths with the postdoc community!

## Upcoming Events next...

### 6th All-Stars Mentoring Event, Oct 25, 4.30pm, Longwood Hall, Longwood Galleria

#### *mentor, n*

1. a person who helps you to reach your career goal
2. a influential senior sponsor or supporter
3. a person who guides and motivates you

Last year's winners of the best mentor awards were:

**Christopher A. Walsh**, Chief, Division of Genetics and Genomics; Investigator, HHMI; Bullard Professor of Neurology and Pediatrics at Boston Children's Hospital, HHMI and Harvard Medical School

and **Maxwell Heiman**, Assistant Professor of Genetics at Boston Children's Hospital

Be ready for this year's outstanding mentors from academia and industry! Take advantage of this event to learn more about **career paths, experiences, and becoming a mentor**.

Gus Cervini will also present the BCH PDA Best Mentor Award 2018 thanks to your participation in the "rate your mentor" survey, **here**:

<https://www.surveymonkey.com/r/RateMentorYour2018>

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**ALL-STAR MENTORING 2018**  
Keynote Address by Sandra L. Fenwick, President and CEO

MAXWELL HEIMAN BCH/HMS	RITA BALICE-GORDON SANDH	DAVID LUDWIG BCH/HMS	JIM GOULD HMS
JOE BIEDENKAPP BLUEBIRD BIO	TARYASA HASAN DF/HMS	ANN JOSEPH SACK WAF LIFE SCIENCE ROYDOR	HANS OETGEN BCH/HMS
CATHY DRENNAN MIT	ELISE DROUIN GENES THERAPEUTICS	TOM SCHWARZ BCH/HMS	GORDON WEBSTER AMBER BIOLOGY LLC
WIM H SCHEELE PFIZER	RAFAEL LUNA BOSTON COLLEGE	AKIKO WAKATSUKA BIODEN	REBECCA SHANSKY NORTHSTAR

BCH PDA 'Best Mentor Award' presented by Gus Cervini, BCH VP of Research  
October 25th 4:30-7:30pm @ Longwood Hall, Longwood Galleria, Longwood Ave. Buffet dinner will be provided.  
Registration is mandatory, places are limited.