Interview: Kristen Parker, Layout: Monika Stamberg

Where are you from?

England. More specifically a small seaside town called Gorleston-on-sea. The kind of place that relies on tourism, but hasn’t been popular with tourists since woollen bathing suits went out of fashion.

What are your research interests?

In broad terms, I am interested in the structures and mechanisms of complex macromolecular machines. In the past, I used cryo-EM to solve the structures of the specialized ribosomes of mitochondria. I now use similar methods to study transport mechanisms in the cell, especially in an organelle known as the cilium. I am particularly interested in the interplay between microtubules, motors, adaptor complexes and their cargoes, and the role of these processes in cilium-dependent signalling pathways.

What made you pursue a career in science?

My parents gave me a microscope once as a birthday present. And that was that. In the future, think very carefully about what you buy your kids!

Do you have any interesting hobbies? What do you enjoy doing outside of the lab?

My kids absorb most of my time outside the lab – I make lots of Lego houses for Barbies and read many stories about little ponies. Otherwise I like travelling and food and Formula 1.

Do you have any pets?

We had two guinea pigs before the kids were born. I think subconsciously they were a trial run to see if we’d be capable parents. They both died.

Favorite piece of laboratory equipment?

I know I should say the Titan Krios transmission electron microscope because of how it has revolutionized my field, but I do have a soft spot for the humble peristaltic pump. I hope that doesn’t make me sound like a hipster.

In this Issue:

• Grad Student & Postdoc Interviews
• Holiday Party Announcement
• Word on the Street: Ice Cream Social 2017
• Alumnus Spotlight
• Career Resources
• Meet the BCMP TC Members
• Lab News
• Lab Publications
• About the BCMP Trainee Committee
Interview & Layout: Monika Stamberg

Who are you and where are you from?
My name is Jessica Lawler. I’m a sixth year graduate student in Don Coen’s lab and the Virology Program. I grew up in a suburb of the Dallas/Fort Worth metroplex and went to college at Texas A&M University before moving up here for graduate school. (Gig ‘em Ags!)

Briefly describe your research interests/research project...
I’ve been interested in viral pathogenesis and manipulation of host machinery since high school, when we were assigned to read The Hot Zone by Richard Preston for AP Biology class. I think it’s amazing how viruses can perform so many complicated functions with so few proteins and limited genetic space, and I think that it’s an exciting challenge to find ways to combat these viruses without being too toxic to human cells. My research project is composed of characterizing the RNase H activity of HSV-1 DNA polymerase and identifying novel functions within the N-terminal domain of the enzyme.

What is a secret talent you have?
I’m surprisingly good at the Dance Dance Revolution, Guitar Hero, Karaoke Revolution, and Just Dance games. I loved to play all of them with my sister as a kid and we spent way too much time learning the tricks.

Favorite Lunch or Brunch Spot (in Longwood Medical Area and Outside of it)
My classmates and I spent a lot of time at Penguin while we were still taking classes, working on homework, watching our fantasy football teams, and editing each other’s qualifying exams. They also have a delicious, reasonably priced brunch on weekends. Outside of Longwood, I love Friendly Toast, especially because they’ve got free snacks and drinks while you’re waiting for a table.

What do you do when procrastinating in lab or in your free time?
I play a lot of board games and video games with my friends, spend a little too much time reading fantasy novels, and love to go outside and hike in the White Mountains when I get the chance.

Any fun plans for the end of the year/Holiday recess?
I’m hoping that my parents can find cheap tickets to come visit me for Christmas this year, and I’d love to go see some Harvard hockey games. Maybe I can plan a trip up to Maine to ski.

What are you looking forward to most in the upcoming year (2018)?
Graduating! It’s been a fun ride, but I’m super excited to be called Dr. Lawler for the first time and see what the future holds for me next.

Friday Data Club: Stick with Penguin Pizza or switch to Il Mundo?
Since I’ve already mentioned how much I go to Penguin, it’s nice to change it up occasionally, so I’d have to say Il Mundo. Honestly, though, as a graduate student I’m pretty sure we had to sign a form committing to eat whatever free food came our way, so I’m not going to complain either way.

Any suggestions for how to make happy hour more fun?
Games! I’d love to have some departmental board and card games we can set up and play quickly, and it would work as a great ice breaker. Also, we could have some cornhole or ladder golf ready to play when the weather is nice and have happy hour in the courtyard.

Anything else you want to share with us?
Thanks to the committee for your work in making the department a fun place to work and giving us so many opportunities to meet each other and network! The retreat is always a wonderful time, Christmas party is a blast, and I spend my entire week waiting for happy hour. So I really appreciate all the time and hard work that goes into planning all these events.
Post Doc Interview:

Pranav Shah

Tell us about yourself and where you are from.
I am originally from India, but I completed my graduate studies at the University of Heidelberg in Germany. There, I worked on a fundamental question in virus replication, which was, how do non-enveloped viruses organize their replication activities in the absence of membrane involvement to support virus induced replicative structures? After successfully defending my thesis I joined as postdoc Dr. James Hogle’s group here at the BCMP.

What is your current research focused on?
Our group is interested in visualizing the process of a non-enveloped virus’ entry at an atomic level. We apply cryogenic electron microscopy to our model organism, poliovirus, to achieve this.

How do you spend your time outside of lab?
Outside the lab I enjoy taking pictures, sampling different cuisines and noodling on my guitar.

What’s your favorite place to visit around Boston?
I have only been in Boston for two months, so I don’t really know much about the city yet. The parks do look inviting though!

If your lab bench suddenly disappeared tomorrow and you could no longer be a scientist, what would you do instead?
I would be making money of course!
Compiled at this year’s Ice Cream Social on July 19, 2017
We surveyed a few members within BCMP:
Favorite flavor of ice cream | Favorite pastime outside work

Christina | Kruse Lab
Saffron
Playing the drums

Arthur | Wu Lab
Butter Pecan
Jogging

AI | DNA Resource Core
Mint Chocolate Chip
Attending Baseball Games!

Catherine | Struhl Lab
Raspberry & Cream Gelato
Reading True Crime
Don’t Miss!
BCMP Happy Hour
Fridays @ 5pm, Outside Cannon Room
Tell us about your current position and what your lab works on.

I am an Associate Professor/Group leader at the Novo Nordisk Foundation Center for Protein Research at the University of Copenhagen. In my small group (4 people including myself), we study basic mechanisms of DNA replication, replication-coupled DNA repair, and post-replicative DNA repair.

How did you find your position, and what was the process of applying like? Also, what were some of the biggest challenges applying for a professor position overseas? What led you to apply to a position in Copenhagen?

A professor in Copenhagen informed me that they had opened a position. I sent my application soon after as I realized that this was a great opportunity and a great place to open up my laboratory. Copenhagen is known in Europe to be a hub for genome maintenance research. There are numerous labs here that are well known worldwide. I thought I could nicely complement what is being done here and saw a great opportunity to grow as a scientist.

In addition, my wife and I were also looking for a good place to raise a family. Denmark is known as the happiest country on earth! There is a huge emphasis on family and children. Everything here is built and planned for the well being of your family. Family here comes before work, quite contrary to many other places.

The application process for a professor position overseas is very similar to the one in the US. Basically, you need to send a short proposal with a plan for the next 5 years. You are then invited for interview for a couple of days during which you give a presentation and meet with all the different faculties.

My advice for Postdocs seeking academic positions is to go to conferences and let other professors know that you are looking for a P.I. position. If you make a good impression they will remember you once a position is available at their institute.

How do you balance running a productive lab and having a young family? What have you been up to outside of lab since you’ve moved to Copenhagen?

As a P.I., it has become easier to have a more defined schedule. I try to be home everyday around the same time to spend the maximum time with Felix (my 3 year old son) and Maria (my wife).

During this first year, we really tried to take maximum advantage of all the activities offered in Copenhagen. This is a great city to live in with an incredible vibe. Every weekend is filled with concerts, festivals, races etc. Here, most of the population goes to work and moves around the town with their bikes. In fact, we do not have a car and do not even plan to buy one. We also have a lot of family in Europe and it has been very good to visit them over long weekends.

Although you can live your entire life in Denmark without knowing Danish (all Danes are fluent in English), my next big goal for this coming year is to learn the language. Our little Felix is already fluent in Danish as he goes to the Danish day care and this is one of my biggest challenges—understanding what he says! Fortunately, Denmark pays for all expats to learn the language and you can take intensive courses for free. However this will take a lot of time and energy, as it is one of the hardest languages to learn!
Career Resources:
The majority of biomedical PhD’s end up pursuing a non-academic or non-tenure track science related career following graduation. Here we would like to offer up some career resources for students currently in the department:

Career Guidance for Academic & Non-Academic Jobs:

Office for Career Services (for students)  
https://ocs.fas.harvard.edu  
Events: Info, Consultation for Resume writing & review, Connections to Harvard Alumni

Office of Postdoctoral Fellows  
https://postdoc.hms.harvard.edu  
Events: Workshops, Career Panels

GSAS Science Policy Path  
https://projects.iq.harvard.edu/sciencepolicy  
Events: Faculty Chats, Yearly DC Trip

Massachusetts Biotechnology Council  
http://www.massbio.org/

Massachusetts Association for Women in Science  
http://mass-awis.org/

MCO by Harvard University  
https://www.mcb.harvard.edu/graduate/mco/

Postdoc/ Grad Student Committees  
http://www.ascb.org/community-committee/postdocgraduate-student-compass/
# Meet the BCMP Trainee Committee!

1. What is your favorite fall activity?

2. What is your favorite fall recipe or food?

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Role</th>
<th>Activity/Food preferences</th>
</tr>
</thead>
</table>
| Kristen Parker        | Administration                                  | 1. Apple picking with the family at Honey Pot Hill  
                                | 2. Apple cider donuts                                                                   |
| Madhvi Venkatesh      | BCMP Curriculum Fellow                           | 1. Classical Indian dance  
                                | 2. Pumpkin spice bundt cake                                                            |
| Brendan Gillis        | Walter Lab, Lab Manager                         | 1. Apple cider                                                                          |
| HyeongJun Kim         | Post-doctoral Fellow, Loparo Lab                 | 1. Exploring New England with my family                                                  |
| Nathan Schauer        | Graduate Student, Buhrlage Lab                   | 1. Peach picking  
                                | 2. Apple cider roasted chicken                                                          |
| Monika Stamberg       | Research Associate, DNA Resource Core           | 1. Apple picking and wine tasting  
                                | 2. Cranberry apple crisp                                                               |
| Emily Low             | Graduate Student, Walter Lab                     | 1. Cooking  
                                | 2. Roasted chicken                                                                     |
| Hanneke Vlaming       | Post-doctoral fellow, Adelman Lab                | 1. Baking  
                                | 2. Apple pie, or Pumpkin goat cheese                                                   |
| Olga Kochenova        | Post-doctoral Fellow, Walter Lab                 | 1. Listening to the sound of crunchy leaves under my feet  
                                | 2. Pumpkin soup                                                                       |
| Tito Adhikary         | Graduate Student, Walensky Lab                   | 1. Photography  
                                | 2. Apple pie                                                                          |

Compiled by: Emily Low & Monika Stamberg, Layout by: Monika Stamberg
Fall Word Search

1. ApplePicking
2. Attitash
3. CranberryAppleCrisp
4. PumpkinBundtCake
5. Retreat
6. ApplePicking
7. BCMP
8. ExploringNE
9. PumpkinGoatCheese
10. TrainingCommittee
11. ApplePie
12. Cooking
13. NewHampshire
14. PumpkinSoup
A big welcome to the lab’s first graduate student Eileen Ablondi, who did her undergrad at the College of William and Mary in Williamsburg, Virginia, as well as two new postdoctoral fellows: Emily Kaye (from the Larschan lab at Brown University) and Andrew Field (from the Haussler lab at UCSC).

Michiko Inouye, who started a Master’s program at the University of Cambridge (UK), and Ran Taube, who has gone back to his own lab at Ben-Gurion University of the Negev in Israel, have recently departed from the lab.

The Adelman lab received their first grant, and are happy to become part of the 4D Nucleome Consortium.

Katherine Susa joined the Blacklow and Kruse labs as a graduate student. She is from Half Moon Bay, CA and previously attended Williams College.

Stephen Blacklow won an Outstanding Investigator Award from the National Cancer Institute for his project entitled “Notch Signaling in Cancer”.

The Buratowski lab welcomes Adam Volanakis, a new postdoc who did his PhD at Oxford University with Nick Proudfoot.

Farewell to post-doctoral fellow Hyunsuk Suh, who has left the lab and is now a staff scientist at Pfizer.

Farewell to Ethan Van Arnam, now an Assistant Professor (Chemistry) at the Keck Science Center, Claremont Colleges.

Farewell to Tony Ruzzini, now an Assistant Professor (Microbiology and Chemistry) at the University of Saskatchewan.

Farewell to Tom Wyche, now a Research Scientist at Merck Research Laboratory, Exploratory Science Center, Cambridge, MA.
Congratulations and best wishes for continued success to Qing Li on her new position at Magenta Therapeutics and to David Wood on his new job at Abexxa Therapeutics.

We welcome new lab members including David Heppner (Postdoctoral fellow), Byeong-won Kim (Postdoctoral fellow), and Hanchen Zhao (Graduate student in the BBS program).

Congratulations to Zeynep Yurtsever, who got married in July 2017!

It is with heavy hearts that we bid ‘adieu’ to one of our earliest team players at the DNA Core, the Bio-Tracy ZMation Biobank Robot. Tracy served with us from 2004-2017 and was a phenomenal team player. We’ll miss you!

Congratulations to Adrian Wilkie, who defended his PhD dissertation back in May.

Rosio Fernandez has gained quads of steel!

Welcome to Sarah Dixon-Clarke, a new post-doctoral fellow from England, and Qi Liu, a new post-doctoral fellow from China.

Welcome to Alyssa Verano, a new postdoctoral fellow from Dumont, New Jersey; Yang Gao, a new post-doctoral fellow from Yantai, China; Nathaniel Henning, a new lab technician from Bethesda, Maryland; and Theresa Manz, a new graduate student from Saarbruecken, Germany.

Farewell to Quan Cai, who is now a professor at Fudan University.

Congratulations to Hubert Hai-Tsang Huang, a graduate student from the lab, who successfully defended on August 29, 2017!

Congratulations to Behnam Nabet, a post-doctoral fellow, for receiving the American Cancer Society Post-doctoral fellowship!
Congratulations to Daniela Fera, a former post-doctoral fellow, who is starting a new position as an Assistant Professor at Swarthmore College.

Congratulations to Yadana Khin, a former research technician, who is starting a master’s program in Washington D.C.

Welcome to our newest lab members: Tim Caradonna and Jacob Zahm. Tim Caradonna is an M.D.-Ph.D. student and Jacob Zahm is a post-doctoral fellow.

Welcome to Pranav Shah, a new post-doctoral fellow from Heidelberg University, Germany.

Welcome to Sehoon Park from Boston College. Sehoon grew up in Korea and California.

Farewell to Liwei Jian, now at Brigham and Women’s Hospital in the Department of Medicine.

Congratulations to Fangwei Leng, who was just married!

Congratulations to graduate student Cristhian Cadena for passing the preliminary qualifying exam and for being awarded the NSF Graduate Student Fellowship. Congratulations to Sadeem Ahmad for being awarded the Cancer Research Institute Irvington Post-doctoral Fellowship, and for being awarded the Medal for Young Scientists by the Indian National Science Academy. Congratulations to Yu-San Huoh for being awarded the NOH T32 Immunology training grant.
Welcome to new graduate student Katherine Susa, jointly mentored by Steve Blacklow, from San Francisco, and welcome to new technician Anthony Banks, from Ireland.

Farewell to Alex Baier, now in medical school at UMass, and farewell to Christina Capitanio, who has returned to Italy to continue her studies after spending the summer in the lab.

Congratulations to Hayden Schmidt, a graduate student, and his wife, Gail, who were married last month in Boston!

Congratulations to Assaf Alon, a post-doctoral fellow, who was awarded the Merck-BCMP postdoc fellowship.

Farewell to Hongxia Fu, now an Instructor at the University of Washington.

The Struhl lab welcomes research fellow Hanif Vahedian Movahed from Rutgers.

The Loparo Lab welcomes a new post-doctoral fellow, Dr. Yufan Wu. She obtained her PhD from Steven Boxer’s Lab at Stanford University, and drove all the way from the West Coast to the East Coast to join the Loparo Lab.
The lab welcomes Dr. Yael Ben Nun, Dr. Henry D. Herce and Dr. Kyle J. Korshavn for their postdoctoral fellowships!

Dr. Silvia Escudero, a graduate student in the lab, successfully defended her thesis in the spring. Congratulations!

Tito Adhikary, a graduate student, successfully passed his PQE.

The lab welcomes new graduate students Noah Bloch and Michelle Prew!

Professor Walensky recently received the ‘BBS Mentorship Award’ in recognition of his mentoring several graduate students spanning more than a decade. Congratulations!

Welcome to Jared Sullivan, who has joined as an undergraduate researcher, and to new lab manager Brendan Gillis, who joined from Roxbury Community College.

Farewell to lab manager Ben Richards, who is pursuing an MBA at Boston University.

Congratulations to post-doctoral fellow Gheorghe Chistol and his wife Lim, who are expecting a baby boy at the end of January 2018!

Congratulations to graduate student Emily Low for receiving the Ruth L. Kirschstein Predoctoral Individual National Research Service Award. Congratulations to post-doctoral fellow Tycho Mevissen for receiving an award from The Jane Coffin Childs Memorial Fund for Medical Research.

Jonas Miehling, from the Technical University of Munich, joined Wagner Lab as a graduate student intern in June and will be with us until December.

Post-doctoral fellow Joshua Ziarek has started a position as an Assistant Professor in the Department of Molecular and Cellular Biochemistry, Indiana University Bloomington.

Post-doctoral fellow Pooja Sharma will start a research scientist position at Amgen in Cambridge in October.

Graduate Student Intern Krishna Padmanabha Das has returned to his home institution, the University of Graz.

Former postdoc Elizabeth O’Day, Founder and CEO of Olaris Therapeutics, is teaching “Metabolism and Entrepreneurship” at the Chemistry Department at Boston College Chemistry Department and was asked to join the Steering Committee for the World Economic Forum’s Precision Medicine Initiative.
Dr. Yang Li, an Instructor in Hao Wu’s laboratory was awarded the Career Development Fellowship by Boston Children’s Hospital. Dr. Li will investigate the auto-inhibition and activation mechanism of NLRP3. He will also elucidate the interactions between caspase recruitment domains (CARDs) of apoptosis-associated speck-like protein containing a CARD (ASC) and caspase-1, which mediate NLRP3 inflammasome formation.

Dr. Jun Hu, a postdoctoral fellow in the Hao Wu lab who has been awarded a post-doctoral fellowship from the Cancer Research Institute (CRI). Dr. Hu will use high-throughput screening, biochemical characterization and structural studies to identify potential inhibitors against Gasdermin D (GSDMD).

Dr. Jianbin Ruan, a postdoctoral fellow in the Wu lab was awarded a post-doctoral fellowship from the Charles A. King Trust. Dr. Ruan will investigate the role of gasdermin (GSDMD) family of proteins in formation of membrane pores in inflammasome-induced pyroptotic cell death.

Dr. Jean Zhao received an Outstanding Investigator Award by the National Cancer Institute.

Welcome to our new lab members Dr. Chin-Chih Liu, Dr. Sheheryar Kabraji, Dr. Molly DeCristo, and Peichen Pan.
LAB PUBLICATIONS

Adelman Lab


Blacklow Lab


Buratowski Lab


Clardy Lab


Coen Lab

Eck Lab

Gray Lab


Harrison Lab
Harrison Lab Contd.


Kruse Lab


Loparo Lab


Springer Lab


**Struhl Lab**


**Wagner Lab**


**Walensky Lab**


**Walter Lab**


**Wong Lab**


**Wu Lab**


**Zhao Lab**


About the BCMP Trainee Committee:
The Biological Chemistry and Molecular Pharmacology Trainee Committee is responsible for addressing the needs of the graduate students and post-doctoral fellows in the department. This committee is charged with identifying ways to create a sense of community for students and fellows and to increase interactions between trainees and the faculty. Current initiatives of the committee include the publication of the department newsletter and selecting and hosting a seminar speaker. The Committee meets regularly with faculty and departmental administration to suggest and implement improvements for students and fellows. If you have any concerns or suggestions please contact one of the committee members.

Come Join Us!
We’re always looking for additional members within the BCMP Department to join our Trainee Committee. If you would be interested in partaking in the committee, please feel free to come to our next meeting on October 25, 2017, Room C216, 12:30pm!

You can also find us on FB by searching for “BCMP Trainees”

Members of the BCMP Trainee Committee:
Emily Low (Walter Lab) & Monika Stamberg (DNA Resource Core) – Co-Chairs

Assaf Alon (Kruse Lab)  Madhvi Venkatesh (Curriculum Fellow)
Brendan Gillis (Walter Lab)  Nathan Schauer (Buhrlage Lab)
Daniela Fera (Harrison Lab)  Olga Kochenova (Walter Lab)
Hanneke Vlaming (Adelman Lab)  Phong Lee (Harrison Lab)
Hyeongjun Kim (Loparo Lab)  Ravindra Amunugama (Walter Lab)
Jason Heustis (Curriculum Fellow)  Rosio Fernandez (Coen Lab)
Kristen Parker (Administration)  Tito Adhikary (Walensky Lab)
Mabel Duyao (Administration)
Notes from Retreat:
Notes from Retreat: