

LMPost

The LMPost is a bimonthly LMP e-newsletter created by grad students for grad students at UTSG. It features news, articles, and announcements about student and academic life, both on and off campus. By including upcoming events, student talent and alumni spotlights, career development and volunteer opportunities, successful grads and transfers, etcetera, we hope to engage all LMP graduate students across the various research locations.

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AN INTERVIEW WITH LMP ALUMNUS DR. PETER SABATINI

The LMPost would like to introduce you to LMP alumnus Dr. Peter Sabatini. After completing his PhD in LMP, Peter completed an industry postdoctoral fellowship at the biotechnology company Luminex. Peter was then accepted to the Clinical Genetics program at SickKids. Now, Peter is an Associate Director of UHN's Clinical Genetics Laboratory, and was recently appointed an Assistant Professor at U of T. You may also recognize Peter from his grant writing workshops with the Graduate Centre for Academic Communication (GCAC).

In collaboration with CLAMPS, Peter will also be hosting two upcoming seminars to help students enhance their writing and poster skills. Continue reading to learn how Peter made his transition from basic research to clinical science!



LMPost Can you tell us a bit about your time as a graduate student in LMP?

Peter When I did my PhD I was co-supervised by Dr. Lowell Langille and Dr. Michelle Bendeck. My project was about basic cell biology: we were looking at cell migration and how it related to atherosclerosis and blood vessels. I used a number of techniques in my PhD like live cell imaging, and it gave me a chance to get to know what a lab environment was like.

L After your PhD, what steps did you take to acquire an industry postdoctoral position?

P After my PhD, I stayed with Michelle Bendeck for a year to do a postdoc and I was able to complete some projects and figure out the next steps. I was able to get in contact with Luminex, which is a biotech company that makes molecular diagnostic kits. I asked if they would be willing to sponsor me for an industrial postdoc and they were willing, so I submitted a funding application to NSERC, got the money, then I started there.

L As an industry postdoc what types of roles did you have?

P As a scientist, my role was to perform the validation studies which involved performing analytical sensitivity and stability studies, or other general trouble shooting. These types of studies would be important for regulatory clearance by Health Canada or the FDA. I also gained experience dealing with regulation. I would interact with Health Canada or the FDA through audits, by submitting validation studies and revisions, writing protocols and reports, and dealing with the correspondence.

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AN INTERVIEW WITH DR. PETER SABATINI *CONTINUED...*

L What would you say are some advantages or disadvantages of doing an industry postdoc?

P For me, it opened up a whole new realm of possibilities that I don't think were available to me prior to doing it. It gave me exposure to biotechnology, regulation, and diagnostics because I had no actual experience with that in my PhD. Also, I got exposed to the regulatory side of science. During this time I did not publish, and I don't know if many people doing an industry postdoc do. There was limited opportunity to publish like an academic, but in the end it actually opened doors for me.

L How did you subsequently join UHN's clinical genetics lab?

P After my postdoc, I went to SickKids to do a specific genetics accreditation with the Canadian College of Medical Genetics. The program is very competitive so the postdoctoral experience was critical for my application to even be considered. There are really only a few labs that deal with laboratory medicine in a diagnostic setting. Most people who get accepted to the program have done a postdoc that is a little closer to the diagnostic side of things, because that is what they are looking for. So that was a two-year program, followed by an exam I had to pass. From there, I was able to join the team at UHN as a Clinical Molecular Geneticist and Cytogeneticist.



“Sometimes we forget that as scientists, we do have a narrative — a story to tell.”

L What does your role as Associate Director entail?

P Associate Directors are kind of like the gatekeepers; we review lab data, and make sure that it is accurate and appropriate for the clinical context. Because we are scientists, we also interpret data and implement new technologies that would be relevant for the field. My responsibilities are to review the patient's data, to sign out reports that go back to oncologists, assess validation studies that we have ongoing in the lab for implementing new tests, and also just staying on top of the literature to make sure that what we are doing is actually relevant, cost effective, and best for the patients.

L You are also very involved in developing graduate student communication skills through your role with the Graduate Centre for Academic Communication. What critical mistakes do you often see students making in their writing/grant apps?

P One of the biggest mistakes is the appropriate use of what we call strength of claim words, such as hedges and boosters. We often as scientists veer towards being cautious but we don't always need to be. It's not as direct, or just shows lack of confidence, so we need to consider when it is an appropriate time to be cautious and when is an appropriate time to be confident. So often the mistake is the inappropriate use of those. The other is more just a holistic thing. Sometimes we forget that as scientists we do have a narrative — a story to tell. Oftentimes, I don't think we relate to that. Having a narrative makes it easier for a reader so that they know what the story is and if there is a specific, consistent message.

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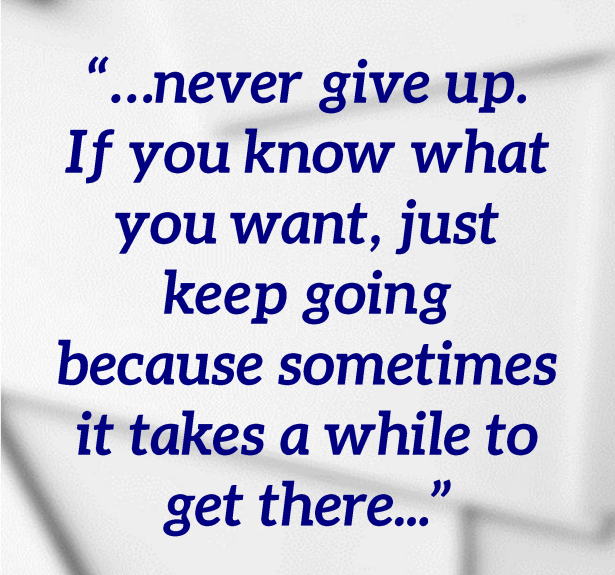
AN INTERVIEW WITH DR. PETER SABATINI *CONTINUED...*

L What would you say to students who feel funding decisions are somewhat random?

P I wouldn't approach it so negatively, you know what I mean? It might feel that way, but you always have to put your best foot forward. You'll never go wrong doing that. You'll have more success if you go forward with a little more passion and positivity. Also, I'll just say if it does feel like a lottery, remember you can't win if you don't play.

L Since there are so many factors that go into applications, what do you think students should focus on to increase their chances?

P It's hard to say exactly what, but there are things you can change and things you can't change. You can't change your past marks so you really want to focus on the things you can change. So always taking opportunities to show your data at any conference, of course the more international ones have more weight than a local one, but I would never say no to presenting it at a local one. Submit abstracts, and get involved in other academic opportunities such as leadership roles in the department, like CLAMPS.



**“...never give up.
If you know what
you want, just
keep going
because sometimes
it takes a while to
get there...”**

L Since you will be hosting two upcoming seminars for LMP students, what skills can students be prepared to learn?

P Since you are all grad students, you already know how to make a poster. We will go over what strategies make it more effective and stand out. It will help you present it more clearly and also help the person reading it receive it better. And it's the same idea for the grant-writing workshop. We all know how to write, we all know what goes into grants and proposals, but it is easier said than done. So we will go over what works and doesn't work. The workshops will be hands on, so I would suggest coming with a project in mind to get the most out of it.

L Do you have any final pieces of advice for LMP students?

P First: never give up. If you know what you want, just keep going because sometimes it takes a while to get there. Second, I think it's just to be specific when you are asking people for help. When I got involved at Luminex, I didn't cold call companies to find a position — I don't think that would have worked. I was able to make a contact at Luminex because I specifically mentioned that I wanted to work there to someone who had connections there. If I had not been specific, I probably wouldn't have gotten that opportunity.

**Grant Proposal Writing Workshop with Dr. Peter Sabatini:
Tuesday, February 6, 2018 from 4:30 pm - 6:30 pm, MSB 6222
(Also keep an eye out for a poster presentation workshop in March!)**

LMP *ost*

The Rise of Predatory Journals in Academia (and how to protect yourself)



Wherever there is desperation, there will be exploitation. Academics, whose success is often dependent on, and measured by, publishing in scientific journals, have become increasingly vulnerable to predatory journals—groups that promise an easy path to publication in exchange for submission fees, without peer review or a legitimate publication platform^{1,2,3,4,5}. Predatory journals fittingly take their cues from other online scams that you are probably already familiar with. These journals recruit academics by spamming email inboxes and advertising their publication services, and have names that are similar to reputable journals, such as “Naturepub” or “Science Publishing Group”¹. This is just a shortlist of the most prominent tactics used, but after spending some time researching predatory journals, you will come across several more.

How big is this problem? It was estimated that there are nearly 10,000 predatory journals that publish hundreds of thousands of articles annually^{2,6}. This means a staggering amount of resources and data is being squandered.

Despite claiming to be open access, data published in predatory journals can be difficult to find. An analysis of patient and animal resources used in studies submitted to predatory journals was revealed to use data from nearly 2,000,000 subjects and 8,000 animals³.

These data are essentially lost since the articles from these journals typically cannot be accessed by searches using conventional library resources such as Web of Science³.

Even in cases where a person can access these data, the lack of peer review effectively makes any research based on them illegitimate.

Likewise, the money used to fund projects that end up in predatory journals is wasted. In a study of articles published in these types of journals, it was found that 17% were funded by granting agencies such as the National Institutes of Health in the USA. This means that already critically limited funding resources are being allocated to non-peer reviewed research³.

Some are of the opinion that most researchers that submit to these journals are unaware that they are illegitimate⁴. Two years ago, it was revealed that in 2010 Health Canada was duped into partnering with InTech, a publishing group notorious for academic negligence^{7,8}. The partnership was created after an employee received a spam e-mail from the group requesting a submission. The ability of individuals to detect these journals as illegitimate is lacking due to the deceptive nature of their recruitment, as well as of a lack of research on the submitter’s part.

Others in the field also suggest that some researchers are complicit in this practice in order to gain a competitive edge⁵. By pumping out publications in these low integrity journals, one can appear extremely productive on their CVs. As a result, employers are paying more attention to journals listed on applications when making hiring and funding decisions³.

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The Rise of Predatory Journals in Academia (and how to protect yourself) *continued...*

What can you do to make sure you don't become a victim of these journals? Make sure you thoroughly research a potential journal before submitting your work to them. Check out [Beall's List of Predatory Journals](#) list for an archive of predatory journals compiled by University of Denver Colorado Professor of Library Sciences Jeffrey Beall.

In addition, Professor Beall has also defined [criteria](#) to help you identify predatory journals, and laid out some useful tips.

Some tips include:

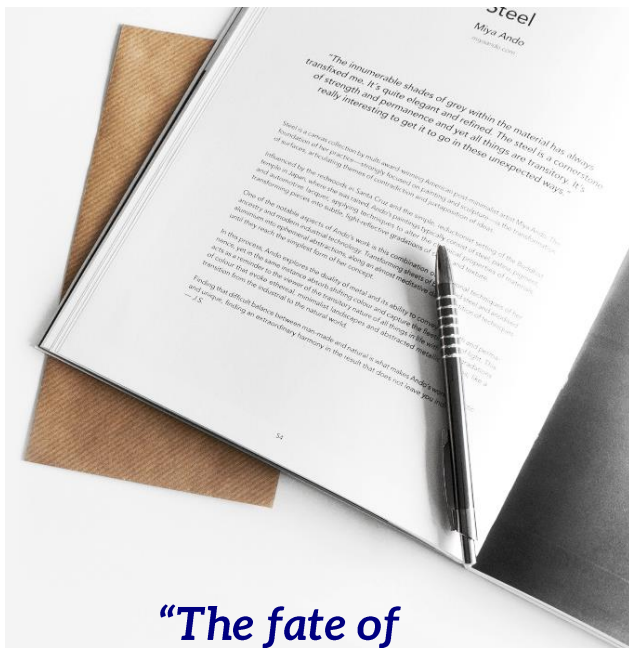
- 1) Beware excessive submission fees or “fast-track” publication payment options,
- 2) A lack of academic or industry associations,

- 3) A failure to reveal editor identities.

If you're still unsure, consult your supervisor about journal selection. If you feel any pressure pushing you to publish in a predatory journal, you can speak with the department or [Graduate Conflict Resolution Centre](#) for advice.

As light continues to be shed on predatory journals, expect publication and funding guidelines to change in order to avert this crisis³. As the next generation of scientists, we must pay close attention to where we submit our work in order to preserve the peer review process.

The fate of scientific integrity depends on how we deal with these exploitative journals.



“The fate of scientific integrity depends on how we deal with these exploitative journals.”

Author's Note: The issue of predatory journals is highly complex, and this article only scratches the surface of this topic. Independent research is highly recommended. Below are a few references to help get you started.

References

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LMPost

SH*T PIs SAY

Share funny and relatable things supervisors say. They can be funny, outrageous, annoying, or even shockingly strange. Below are real life examples. Care to share? Impost.utoronto@gmail.com

“It would be really interesting to see what happens at a 12 hour time point... you’re going to have a long day!”

***Spends 3 hours getting the best microscope image possible, then shows PI* “Looks like sh*t”.**

***PI calls you over* “I want you to meet this postdoc. They know this really cool technique that I want you to learn, even though I’m not sure what we can use it for yet!”**

***Gives PI report draft for feedback, they glance at it, then give it back* “Looks good!”**



CLAMPS & DEPARTMENT EVENTS

FacMed Trivia Night: Monday February 5, 2018 from 7:00 pm - 10:00 pm @ O'Grady's Tap & Grill, 171 College St.

***New!* Proposal Writing Workshop with Dr. Peter Sabatini:** Tuesday, February 6, 2018 from 4:30 pm - 6:30 pm, MSB6222 (Also keep an eye out for a poster presentation workshop in March!)

PhD Transfer Session: Monday February 12 from 5:00pm – 6:00 pm @ Location TBD

Wine & Cheese Semi Formal: Friday February 23, 2018 from 7:00 PM – 10:00 PM @ 1001 Bay St. Party Room Toronto, Ontario. [RSVP](#) before February 19th!

LMP Goes to a Raptors Game: Monday, February 26, 2018, Raptors vs Detroit Pistons.

Science REACH Program: Friday March 16, 2018. Science REACH is a full day event for high school students interested in studying science. If you are interested in volunteering to have a Reach participant shadow you in the afternoon and/or are interested in giving a short talk in the morning, please fill out this form: <https://goo.gl/forms/Fr29vRldvYyhHjyU2>.

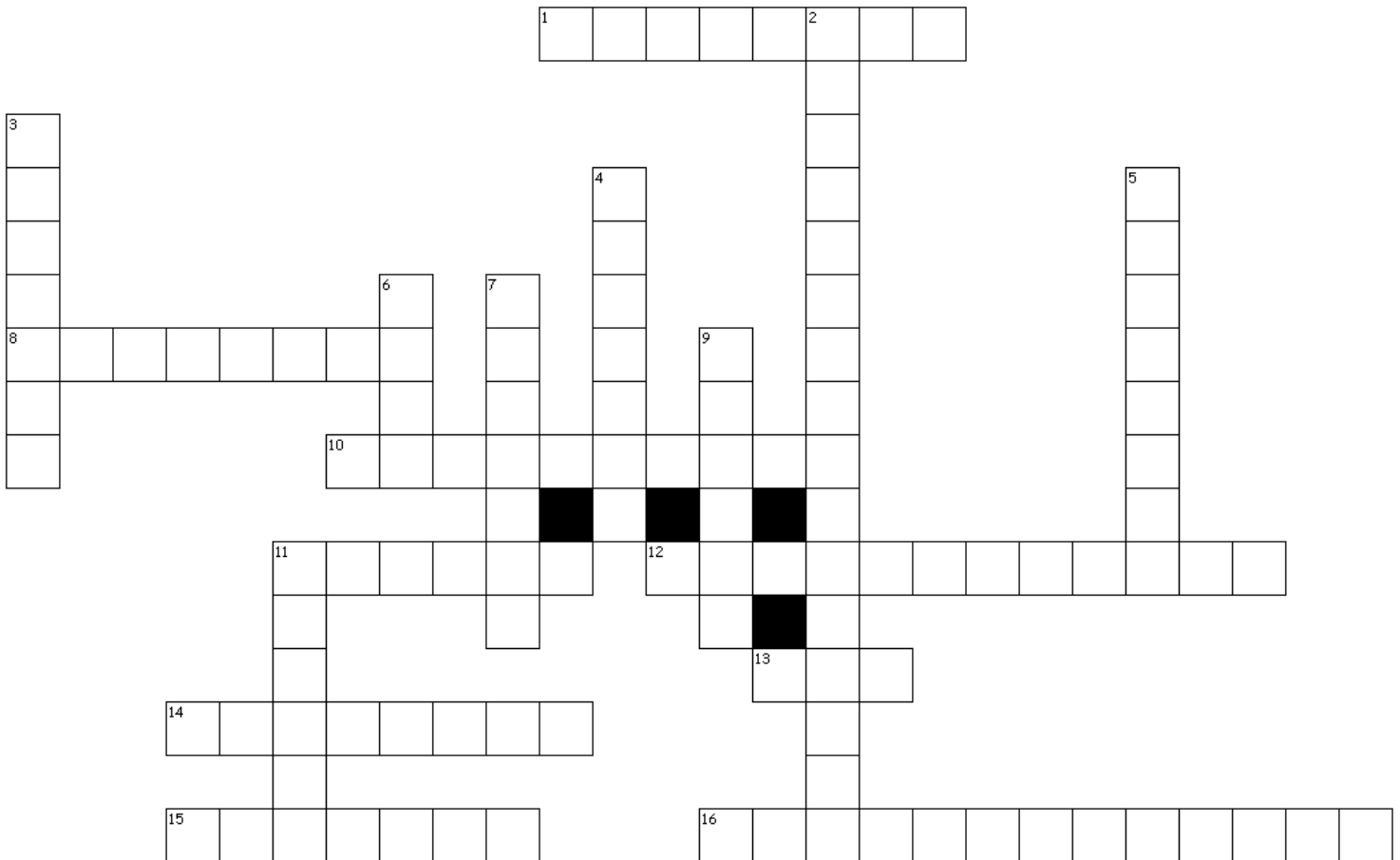
Graduate Research Conference: Tuesday April 3, 2018 from 9:00 am – 5:00 pm @ 89 Chestnut Street, 2nd Floor.

*Remember to keep an eye out for the **CLAMPS Weekly Digest** every **Monday** – it has a list of all the upcoming events you won't want to miss!*

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MOLECULAR BIOLOGY CROSSWORD

Test your wits while you wait in between time points with this crossword! If you are interested in contributing a future edition, contact us at Impost.utoronto@gmail.com



Across

1. Sacs from cells
8. Leading company in genome sequencing
10. Microscope used to image chemically cleared tissue (2 words)
11. Genetic regulatory region
12. Powerhouse of the cell
13. 700nm emission appearance
14. Coined the term "prion"
15. Molecular key
16. Super sweet peptides

Down

2. Analyze mass-to-charge ratio of proteins (2 words)
3. Adenosine's ally
4. Body fat
5. T in tRNA
6. Showcases nuclei
7. Kidney's Brita Filter
9. A neuron's blanket
11. 2016 Nobel Prize winner in Physiology or Medicine

Answers
can be
found on
page 10.

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CALL FOR CONTRIBUTORS AND SUBMISSIONS

The LMPost is always interested in submissions from fellow LMP students and alumni, including opinion pieces, be it related to student and campus life, academic and non-academic issues, career development, upcoming events and volunteer opportunities.

Please e-mail us at Impost.utoronto@gmail.com if you're interested in joining our team! Of course, help and guidelines will be provided.

There are many ways to contribute:

- **Sh*t PI's Say:** this regular column includes funny tidbits we PI's say!
- **LOL My Thesis:** turn your formal thesis title into funny or ironic one-liners for all to enjoy.
- **Quirky or Unconventional Scientists:** is there a scientist - past or present - who you think has an interesting story? Help the rest of us discover them with this fun column.
- **Career Development:** attend / write about career development events and potential career paths, interview LMP alumni, etc.
- **Community Engagement:** highlight volunteer opportunities and community events that grad students can participate in, attend local events and write about your experience, etc.
- **LMPubs:** interview LMP graduate students who recently published a journal article about their research, etc.
- **Event Photographer:** attend and photograph CLAMPs and department events, as well as obtain written consent from individuals to publish their photo

*We welcome contributions
on a rolling basis,
and we're always happy
to hear from you!*



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CROSSWORD SOLUTIONS

Across: 1. Exosomes, 8. Illumina, 10. Light Sheet, 11. Operon, 12. Mitochondria, 13. Red, 14. Prusiner, 15. Epitope, 16. Glycoproteins

Down: 2. Mass Spectrometry, 3. Thymine, 4. Adipose, 5. Transfer, 6. DAPI, 7. Nephron, 9. Myelin, 11. Ohsumi

THANK YOU!

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FOR READERS

Letters to the editors can be sent to Impost.utoronto@gmail.com, and may be edited for conciseness and, or clarity. The LMPost reserves the right to edit, alter, publish, or refuse to publish, anything submitted for publication.

All contributions, comments, suggestions, or complaints should be sent to Impost.utoronto@gmail.com, including submissions for Lol My Thesis, Sh*t PIs Say, LMPubs, etc.

The views and opinions expressed in the LMPost newsletter do not necessarily reflect the official views of the Department of Laboratory Medicine and Pathobiology, or the Confederation of Laboratory Medicine and Pathobiology Students (CLAMPS).

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