THE DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR GENETICS

News Letter #14 (April 1, 2019 – March 31, 2020)

Faculty News

Funding Update:

- New NIH grants:
  - Dr. Raychaudhuri: 1R01CA243247A1 for 4 years
  - Dr. Merrill: 1R21OD027080-01 for 2 years

- Dr. Jiyeon Kim received the following grants:
  - American Lung Association's Lung Cancer Discovery Award for two years
  - The V Foundation for Cancer Research award for two years

- Drs. Ackerman and Gaponenko received CBC (Chicago Biomedical Consortium) Round 3 Accelerator Award for 1 year

- Dr. Lavie received CBC (Chicago Biomedical Consortium) Award for year 2

- Drs. Ackerman, Gaponenko and Shikano received funding through the UIC DPI (Development Partners Institute) Cycle 2 Seed Funding Program for 2 years. Their project was selected for funding from over ninety DPI Cycle 2 applications following three rounds of review

- Drs. Ackerman, Gaponenko and Shikano were awarded 20 hours of free consulting from the OTM competition for SBIR/STTR grant applications by their paid consultant Anna Lisa Somero

Other News:

- We welcome Dr. Konstantinos (Kostas) Chronis who joined our faculty in November 2019 as Assistant Professor

- Dr. Segev has been awarded the honorary title of University Distinguished Professor for 2019-20

- Dr. Hay was elected as a Fellow of AAAS (American Association for the Advancement of Science). AAAS recognizes individuals as AAAS fellows for their advances of science applications that are regarded as scientifically or socially distinguished

- Dr. Katzen retired as of 6/30/19 and has been given title of Associate Professor Emerita
Drs. Ackerman, Gaponenko and their labs' students, postdoctoral fellows and collaborator from the NCI were awarded a new US patent: Ackerman, S.J., Laffey, F.G., Hitchinson, B., Garnier, B., Gaponenko, V., Tarasova, N.I., and Abdelkarim, H. Peptide Inhibition of CCR3-mediated Diseases or Conditions. US patent: No. 10,363,286. July 30, 2019

Dr. Friedenson incorporated a biotechnology startup ("Cancer Specific Antibody Prescriptions, Inc.") to commercialize his invention

Dr. Kuchay was an invited speaker at FASEB Science Research Conference, “The Regulation and Function of small GTPases”, New York, NY, June 23-29, 2019

Dr. Frolov was an invited speaker at the following conferences:
  - 60th Annual Drosophila Conference, Dallas, TX, March 27-31, 2019
  - Fly Cell Atlas, HHMI/Janelia Research Campus, VA, March 24-26, 2019
  - 5th International RB meeting, Charleston, SC, September 29-October 2, 2019
  - Drosophila as a cancer model, Barcelona BioMed Conference, Barcelona, Spain, April 8-10, 2019

Dr. Ackerman was a featured plenary speaker at the following conferences:
  - GlaxoSmithKline (GSK) Eosinophil Summit meeting, Atlanta, GA, November 2019
  - Biennial Symposium of the International Eosinophil Society (IES), Portland, OR, July 2019

Dr. Simonovic was invited to the following conferences:
  - Session co-chair and invited speaker at the Tom Steitz Memorial Session at the 2019 American Crystallography Association Annual Meeting, Cincinnati, OH, July 20-24, 2019
  - Invited speaker at the 12th International Symposium on Aminoacyl-tRNA Synthetases, Hangzhou, China, Nov. 5-9, 2019

**Faculty in the news:**

- Dr. Lavie (6/17/19)  
  [https://today.uic.edu/uic-startup-raises-nearly-1m-to-help-develop-safer-leukemia-chemotherapy](https://today.uic.edu/uic-startup-raises-nearly-1m-to-help-develop-safer-leukemia-chemotherapy)

- Drs. Merrill & Simonovic (7/8/19)  

- Drs. Ackerman, Gaponenko & Shikano (7/16/19)  
  [https://today.uic.edu/uic-dpi-cycle-2-seed-funding-program-awards](https://today.uic.edu/uic-dpi-cycle-2-seed-funding-program-awards)
General News

- Abdul was awarded the well-deserved 2019 UIC Award of Merit to recognize his outstanding contributions to the Department and to UIC. Congratulations!

- Dr. Alexandre Aissa (Benevolenskaya lab) received Gold Medal honors in ‘Postdoctoral Fellows and Residents’ category at poster presentations from the 2019 COM Research Forum, held on November 22, 2019

- Drs. Hien Ahn Nguyen and Amanda Schalk (both from Lavie Lab) were recognized on Halo’s “40 under 40” list. They have been nominated and selected for their excellent work in translational research. According to Halo, “these 40 scientists represent the next generation of big shoulder Chicago scientists working to translate innovation into application, from bench to bedside”

New Employees

We welcomed the following new employees:

- Ms. Nefertiti Muhammad (Res Spe, Kim Lab)
- Ms. Zihan Qiu (Res Spe., Kuchay lab) – left in Jan. 2020
- Dr. Yongjae (James) Kwon (Sr. Res. Spe., Frolov Lab)
- Mr. Mohamed Haloul (J-1 Res Collaborator, Kim Lab) – left in Feb. 2020
- Dr. Hyun Min Lee (Postdoc, Kim lab)
- Mr. Ryan Conrardy (Res Spe, Benevolenskaya Lab)

Placement Student:

- Holly Jefferson, University of Bath, UK (Frolov Lab)

BMG Retreat

The 11th BMG Annual Retreat was held August 23rd & 24th 2019, at the Grand Geneva Resort in Lake Geneva, WI.

As in past retreats, the retreat provided a venue for faculty, postdocs and graduate students to present their work in form of seminars and poster presentations. We had total of 68 participants this year, including 9 new graduate students who were interested in the research programs of our department. We also hosted guests from the UIC Department of Surgery and Department of Medicine.
The retreat allowed the department members to get to know each other better through multiple events - poster competition, dinner and last but not least, soccer match!

Congratulations to the following award winners!

- Daniel Principe (Rana Lab) on the best talk award “Gemcitabine Primes the Pancreatic Cancer for Second Line Immunotherapy”
- Hannah Pennington (Merrill Lab) on the best poster award “Modulation of Genome Editing Outcomes Using Cas9 Regulation”
- Candice Loitz (Simonovic Lab) on the best poster award “The Impact of Pathogenic Mutations on the Structure and Function of SepSecS”

As for the faculty, they once again demonstrated their athletic leadership and won the soccer game!

We thank the retreat organizers Drs. Sojin Shikano and Yukari Okamoto, as well as the administrative staff who supported them. We also thank faculty members who have contributed to the poster/talk prizes. Our special thanks go to Dr. Jack Kaplan, who was unfortunately not able to attend this time, for supporting this important annual event!

A few highlights......
Student News

Awards:

- Daniel Principe (Rana Lab) received the following awards:
  - Provost's Graduate Research Award
  - First-place winner of the still image competition in the UIC Image of Research exhibit, October 2019
  - Honorable Mention in the 'Graduate, MD-PhD, and other combined degree students’ category at poster presentations from the 2019 COM Research Forum, held on November 22, 2019

- Kaityn Kiernon (Simonivic Lab) received the Provost's Graduate Research Award

- Ryan Clarke (Merrill Lab) received 2019 Dean's Scholar Fellowship. The Dean’s Scholar Fellowship is one of the most distinguished and competitive awards that UIC offers to graduate students. Those chosen are the students considered most promising, and most likely to make outstanding contributions to this institution and to their fields of learning

Undergraduate Students

- The following undergraduate students were awarded Chancellor’s Undergraduate Research Award (CURA):
  - Jennifer Castillo (Simonovic Lab)
  - Shawn Spriuel-Rhyne (Kim Lab)

- Jennifer Castillo (Simonovic Lab) was also selected to attend 2019 UIC Summer Research Opportunities Program (SROP). She also received Summer Internship from the RNA Bioscience Initiative at the University of Colorado, Denver, CO
Thesis Defense:

- Congratulations to the following students who successfully completed their Thesis Defense:

<table>
<thead>
<tr>
<th>Name</th>
<th>Lab</th>
<th>Thesis Defense</th>
<th>Current position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matthew Macdougall</td>
<td>Merrill</td>
<td>April 15, 2019</td>
<td>3rd year Medical Student, UIC</td>
</tr>
<tr>
<td>Ryan Clarke</td>
<td>Merrill</td>
<td>August 12, 2019</td>
<td>CEO, Cellalgorithmics, Chicago, IL</td>
</tr>
<tr>
<td>Georgina Mancinelli</td>
<td>Grippo</td>
<td>November 22, 2019</td>
<td>Postdoc, UIC</td>
</tr>
<tr>
<td>Casey Blaha</td>
<td>Hay</td>
<td>March 27, 2020</td>
<td>3rd year Medical Student, UIC</td>
</tr>
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Casey’s thesis defense was our first thesis defense with social distancing due to COVID-19 pandemic! See pictures below!

BMG Alumni News

- Tanya Stoyanova (Raychaudhuri Lab), Assistant Professor at the Stanford University- received a R37 Merit Award along with a R01 grant from NCI for her research on prostate cancer

- Gaurang Bhide (Colley Lab), has taken up a position of Senior Scientist, Biologics Discovery at AbbVie, Inc., North Chicago, IL

BMG Publications

Our faculty, staff and students continue to do great research and publish their work in some of the best journals as well as contribute to book chapters. Make sure to periodically check 'publication record' under faculty profiles at our department website [http://bcmg.com.uic.edu/faculty/index.html](http://bcmg.com.uic.edu/faculty/index.html)
Congratulations to Matt MacDougall (Merrill Lab) who got married to Sarah Yasmeen Afzal May 26, 2019!

Congratulations to the following proud parents!

Paula Zappia (Frolov Lab) and her husband welcomed baby boy, Nico, on December 9, 2019.

Zhanna Lipatova (Segev Lab) and her husband welcomed baby boy, Lucas, on April 2, 2020.

Wanian Alwanian (Tyner Lab) and his wife welcomed baby boy, Salman, on February 20, 2020.
Grant Writing Timeline

60 Days
- Panic: Grant due in fewer than 60 days!

30 Days
- Submit papers in time for review/revision: need “in press” status
- Nightmares begin

10 Days
- Submit budget to Univ grants office
- Set goal: Write “Significance” & “Approach” sections in 3 days
- This project is great!

5 Days
- Try to convince self that project is innovative
- This project sucks!

2 Days
- Univ grants office wants justification for rubber gloves
- Innovation! Innovation!

1 Day
- Students revolt! Insert preliminary data
- Ask colleague to read/critique proposal. What do you mean, “Not enough time”?
- Update biosketch: “Personal Statement”
- Panic! Realize “Drink beer after 5” isn’t “Future Directions” and “Timeline”

12 Hours
- Write “Abstract”
- Remove single word lines. Reduce space btw paragraphs. Save 1/4 page
- Insert “References.” Why so many?

1 Hour
- Reduce size of 3 figures. Now within page limits
- Life is good. Have a beer
- Find two paragraphs out of order. Spelled “protein” as “proteins” 8 times

New policy: Students work every weekend to collect preliminary data
- Must pad pubs list: Quick! Finish experiments, write papers
- Insomnia starts: Awake at 3:30 am
- Write “Specific Aims” section
- Univ grants office ignores budget
- Re-write “Significance” & “Approach” sections
- Fold old Aim 3 into Aim 2; Write new Aim 3
- Four emails + 3 phone calls to define “modular budget” to Univ grants office
- Spend five hours cursing MS Word - Why does it keep moving the figures?
- “Innovation” section comes in a dream
- 2.5 pages over limit. Must edit
- Re-write “Specific Aims” section
- Explain to grants office why -20°C freezer is not a “household” item
- Must delete eight lines of text. Seriously?
- Student finishes critical experiment. Make figure
- Submission deadline
- Change tuition from $7825 to $7834
- Univ grants office approves budget
- Confirmation email. No submission errors!
- First night w/o nightmares
- Plan for life without funding

“Anti-intellectualism has been a constant thread winding its way through our political and cultural life, nurtured by the false notion that democracy means that ‘my ignorance is just as good as your knowledge.’”
— Isaac Asimov