

# ANATOMY & CELL BIOLOGY

## NEWSLETTER

June 2020

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### UPCOMING SEMINARS

Will resume in fall 2020

### SAVE THE DATES

#### PhD Public Lecture

June 25th, 2020

#### Murray Barr Lecture

October 23rd, 2020

### STAY IN THE LOOP

Tag us at [#westernuACB](#)



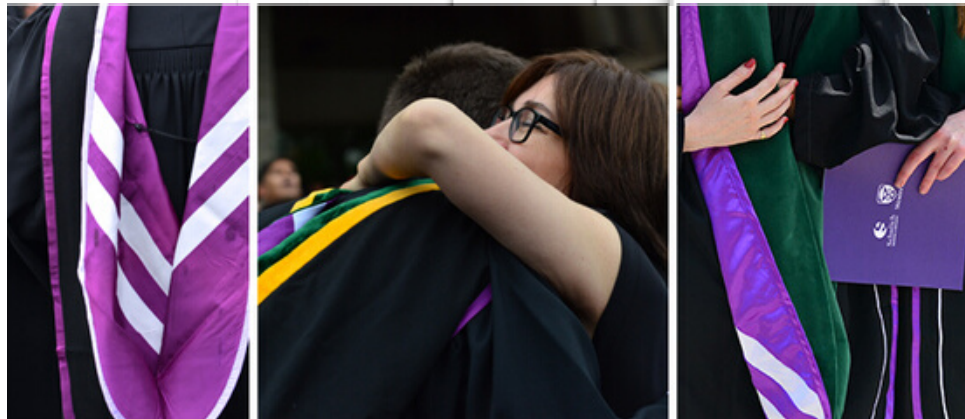
ACB Events  
Calendar



@westernuACB



ACB Graduate  
Council



### CONGRATULATIONS TO THE GRADUATING CLASS OF 2020

Congratulations to all of our graduating students of 2020. This significant milestone represents the culmination of all of your hard work and the commitment to excellence that is central to all programs in Anatomy & Cell Biology...

[Read the full article from Dr. Alison Allan here](#)

#### MSc Graduates

Victoria Agapova  
Diana Alexandra Draghici  
Mackenzie Fraser Ferguson  
Katelyn Stephanie Mottola Marchiori  
Kaitlin Marshall  
Hannah Mary Rose Roberts  
Kevin Santiago  
Michelle Woitowich  
Liliana Wolak

#### PhD Graduates

Sarah Chadwick  
Tim Han

### CONGRATULATIONS

Congratulations to Tian Yu (Tim) Han (Flynn Lab) and Sarah Chadwick (Lajoie Lab) who successfully defended their PhD theses entitled "3D Culture Strategies for the Dynamic Pre-Conditioning of adipose-derived stromal cells on decellularized adipose tissue bioscaffolds" and "Regulation of endoplasmic reticulum stress in *S. cerevisiae*" respectively.

**THE BOOK STORE @ WESTERN IS  
NOW ACCEPTING ONLINE ORDERS!**

<https://bookstore.uwo.ca/>



## SCHOLARSHIPS, AWARDS & GRANTS

The Department of Anatomy & Cell Biology would like to extend its congratulations to the following student recipients of the **OGS**, **NSERC** and **CIHR** awards:

### OGS Award:

Gaji Jaju – Renaud lab  
Amanda Rampersaud – Renaud lab  
Brent Wakefield – Penuela lab  
Jenna Kits – Allan lab  
Braeden Medeiros – Allan lab  
Alyssa Moore – Willmore lab

### NSERC CGS-D Award:

Victoria Jaremek – Whitehead & Sposato lab  
Brooke O'Donnell – Penuela lab

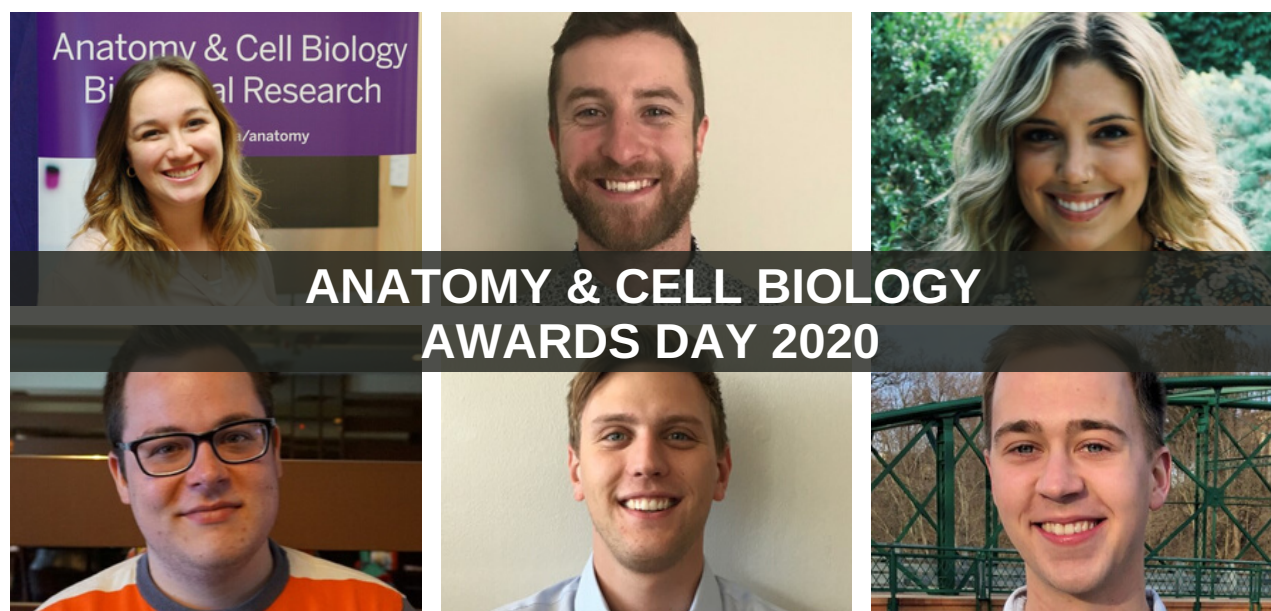
### CIHR CGS-M Award:

Salonee Patel – Allman & Whitehead lab  
Wendy Wang – Whitehead lab  
William Pinsky – Whitehead & Walton lab  
Sarah Myers – Whitehead & Sposato lab

### CIHR CGS-D Award:

Katherine Quesnel – Berube lab  
Andrew Deweyert – Drs. Schmid and Hebb

Congratulations go out to all graduate students for submitting outstanding scholarship applications. We are proud of you all.



## ACB AWARDS DAY 2020

Congratulations to the following Anatomy and Cell Biology Awards Day 2020 recipients:

Pascal Morrisette- Martin – The Suzanne M. Bernier Publication Award in Anatomy & Cell Biology  
Julia Abitbol – The Keith L. Moore Doctoral Award  
Jeremi Laski – The Robert C. Buck Master's of Science Award  
Hanna Szkudlarek – The Coolen Postdoctoral Scholar Publication Award in Anatomy & Cell Biology  
Hannah Roberts – The Alan W. Hrycyshyn Master's of Science, Clinical Anatomy Award  
Andrew Horne – The Wayne Davis Clinical Anatomy Graduate Prize  
Mackenzie Ferguson – Francis Chan Humanitarian Prize  
Kaitlin Marshall – The Dr. Khadry Galil Translational Research in Clinical Anatomy Award

Congratulations to Undergraduate students; **Peter Lee**, HSP Medical Cell Biology and **Jing Zhou**, Major Medical Cell Biology on being Gold Medal recipients. The Gold Medals are awarded to students with the highest modular average and a cumulative average in the top 10% of students graduating from the program.

## SCHOLARSHIPS, AWARDS & GRANTS CONT...

Congratulations to the 2020 Schulich Medicine & Dentistry Internal Graduate Awards recipients, the following students were among them:

**Faraj Haddad** - Dr. Schmid, awarded a **Jonathan & Joshua Memorial Graduate Scholarship**

**Salonee Patel** - Drs. Allman & Whitehead, awarded a **Jonathan & Joshua Memorial Graduate Scholarship**

**Mariyan Jeyarajah** - Dr. Renaud Nellie awarded a **Farthing Fellowship in Medical Sciences**

**Mila Uzelac** - Dr. Schmid awarded a **Dean's Research Scholarship**

Congratulations to **Dr. Charys Martin** who was awarded the Hippocratic Council Basic Science Teaching Award 2020

Congratulations to Dr. Shawn Whitehead on receiving the **Alzheimer's Foundation London & Middlesex Premier Research Grant** for his project titled "Detecting Microglia Microparticles in Preclinical Models of Alzheimer's Disease" and **WSS-CIHR Bridge Grant** for his project titled "Targeting gangliosides to improve post-stroke recovery."

## CELEBRATING ACHIEVEMENTS



### ACHIEVEMENTS REPORT 2020

The 2020 Achievements Report from the Schulich School of Medicine and Dentistry is now available and can be [read online here](https://www.schulich.uwo.ca/communications/publications/AchievementsReport2020/accountability.html). This year's report includes six stories, one for each of the following categories: Accountability, Research, Education, Care, Diversity and Partnership. **Ornela Kljakic**, PhD student with the Prado Lab has been featured under Accountability for her outstanding dedication and volunteer work with Frontier College.

<https://www.schulich.uwo.ca/communications/publications/AchievementsReport2020/accountability.html>





## CELEBRATING ACHIEVEMENTS CONT...



### FACULTY INTERNATIONAL NEWS

A recent publication regarding Dr. Khadry Galil appeared in a Middle Eastern scientific newspaper late last month. The article speaks about some of Dr. Galil's many achievements, including his surgical glue development and features a photo of him alongside Dr. Murray L. Barr.

The article can be found [here](#) in its original printed language or read in its English translation [here](#).

### Researchers Studying Longterm Effects of Surgical Glue That Could Replace Stitches

LONDON, ON.—A surgical glue that could replace stitches is being studied at the University of Western Ontario here.

The plastic compound has several advantages over conventional sutures, but will be tested for three years to assess its longterm effects, according to the project's principal investigator.

The material is a liquid derivative of cyanoacrylate, Dr. K. A. Galil, associate professor of medicine and dentistry, told CANADIAN FAMILY PHYSICIAN last month. When it comes into contact with moisture from the skin, the liquid hardens into a plastic film. When applied to an incision, blood coagulates on the spot and wound edges are held together for five to seven days. "By that time, a new cell layer has built up from below, and the tissue adhesive falls off the way skin layers fall off", Dr. Galil explained.

The hardened adhesive film also protects the area, keeping bacteria from entering the wound and preventing abscesses which can occur when stitches are used, he added.

Incisions closed with the adhesive heal faster than with sutures because no foreign body enters the wound—the glue rests on the skin, Dr. Galil said.

The glue avoids other problems of sutures such as tunnelling and scarring, he added. Applying the material isn't painful, so it doesn't require anesthesia, he said.

Dr. Galil also pointed out that the method can save time and money because patients don't have to return to have stitches removed.



Galil: sutures may still be needed for deep incisions.

Sutures may still be needed for closing deep incisions, he noted. "In deep wounds, we suture in layers. We don't know if superficial application (of the adhesive) will heal the deep layers".

That use for the adhesive as well as its short and longterm effects will be studied by the UWO researchers over the next three years. Dr. Galil noted that a similar substance was used to treat soldiers in Vietnam. "It did the job on the battlefield under enemy fire, but it had a side effect—it caused a little bit of inflammation", he said. After the war, the material and research on it were "ignored completely".

Dr. Galil has experimented with

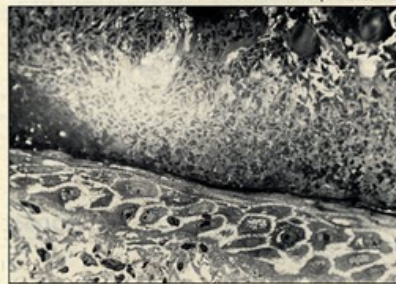
several materials, and is satisfied with the cyanoacrylate derivative. In preliminary studies, it has not caused inflammation. To determine what side effects it might cause, Dr. Galil is studying the adhesive on the mouth epithelium of hamsters, which is virtually the same as in humans. The lifespan of the hamster—about one and a half years—"should be sufficient to tell what the longterm effects will be".

If the hamster testing goes well, Dr. Galil will then study the glue on larger animals, such as dogs, because incisions in those animals are about the same size as in humans. The final stage of the project is the experimental use of the material in human oral surgery.

But he sees many applications for the adhesive beyond oral surgery. "The beauty of this is that it could be used for plastic surgery, and particularly for the face" because there is no scarring. Microsurgery is another possibility. "When you join nerves together, the needle is bigger than the nerve—you have to do some damage."

"We're also thinking about delivering drugs with it", he added. "For example, if you put medicine on a tongue ulcer, it is washed away by the saliva. But we may be able to put a drop of adhesive on the tongue and lock it into place".

Because of its anticoagulant and protective effects, it could also be sold to the public for use in first aid. Dr. Galil has used it in place of a bandage when he cut himself in his laboratory. It should be "very cheap" if produced in large quantities, he feels.



Tissue adhesive on the surface of epithelial cells.

### PRESENTATIONS



### BRAINSTORM STRAIGHT TALK ON CONCUSSION

A video series featuring outstanding Western University researchers.

Dr. Arthur Brown (pictured left) presented his talk "The optimist's guide to CNS therapeutics" as the final video in the four-part series, Brainstorm: Straight Talk on Concussion. [Watch the video here](#).

Ornela Kljakic presented a poster titled "Motivation and cue-directed effort are regulated by acetylcholine/glutamate co-transmission from striatal cholinergic interneurons" at the 1st Virtual Dopamine Conference (ViDA) which was held on May 20th-22nd.

## NEW PUBLICATIONS

# We want to feature your new publications here!

submit them to [anatomy@uwo.ca](mailto:anatomy@uwo.ca)

J.M. Abitbol, R. Beach, K. Barr, J.L. Esseltine, B.L. Allman and D.W. Laird (2020) "Cisplatin-induced ototoxicity in organotypic cochlear cultures occurs independent of gap junctional intercellular communication" *Cell Death and Disease* 11: 1-17. <https://www.nature.com/articles/s41419-020-2551-8>

Martin-Kenny, N. and Bérubé, N.G. (2020) "Effects of a postnatal Atrx conditional knockout in neurons on autism-like behaviours in male and female mice" (2020) *Journal of Neurodevelopmental Disorders*, in press. <https://www.biorxiv.org/content/10.1101/2020.02.05.936260v1>

Baines KJ\*, Hillier DM\*, Haddad FL, Rajakumar N, Schmid S, and Renaud SJ. Maternal immune activation during early pregnancy suppresses neurogenic pathways and dysregulates fetal neural precursor cells in rats. *Front. Immunol.* 09 June 2020 <https://doi.org/10.3389/fimmu.2020.01145>

Adrián Varela-Vázquez, Amanda Guitián-Caamaño, Paula Carpintero-Fernandez, Eduardo Fonseca, Samar Sayedyahosseini, Trond Aasen, Silvia Penuela, María D. Mayán. "Emerging functions and clinical prospects of connexins and pannexins in melanoma" <https://doi.org/10.1016/j.bbcan.2020.188380>

## ACB SEMINAR SERIES 2020-2021

The ACB Research Committee is looking for speaker nominations for the ACB Seminar Series for the 2020-2021 Academic year. This year the Friday seminars will be held in a virtual format with speakers presenting via Zoom. This allows us the unique advantage of inviting speakers from all over the world without travel or budget restrictions. We encourage all of you (faculty, students and staff) to **nominate 1 speaker**, by completing the [nomination form](#).

ACB Seminar  
Series Speaker  
Nomination  
**CLICK HERE**

## 2020 ACB PROMOTION & TENURE

### PUBLIC SOLICITATION FOR DR. STEPHEN RENAUD

### NOTICE TO ALL FACULTY AND STUDENTS

Dr. Stephen Renaud is being considered for promotion to Associate Professor and the granting of tenure, which requires a public solicitation for letters. For more details and if you're interested in providing a written submission please [click here](#).

## ACB EVENTS



### VIRTUAL TRIVIA NIGHT

Congratulations to the winner of Trivia is not so Trivial pt. 2! It was a very close game with Kelly Baines placing first followed closely by Michele Klaunsner in second. Thank you again to Dr. Tim Wilson for graciously donating the prizes, we hope our winners enjoyed them! Want to play again, or missed out last time? Stay tuned for upcoming dates

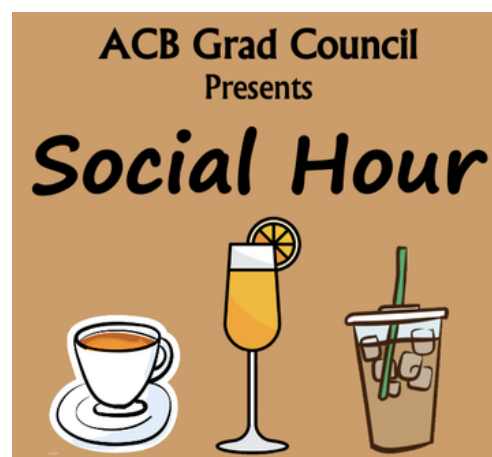
### GRAD STUDENT SOCIAL HOUR

Kelly Baines and Paige Easnor as part of ACB Grad Council will be hosting social hours on Zoom weekly:

**Mondays 3:00pm-4:00pm**

**Thursdays 10:00am-11:00am**

These meetings are meant to provide a safe space for ACB Grad Students to express any concerns and to reconnect with peers during this time. Grad students will have received a Zoom meeting ID via email, please reach out to Kelly, Paige or the ACB Admin staff if you need this provided to you again.



### ACB GIVES BACK



### ST. JOHN'S HOSPITALITY DINNER

St. John's is continuing to serve those in need during the Covid-19 pandemic, and requires the ongoing support of Volunteers to help prepare and serve food at the community dinners. Social distancing measures and precautions are in place to ensure the safety of volunteers and patrons. To register, please add your name to the volunteer sign up sheet by [clicking here](#)