



Stem Cell & Regenerative Medicine Center

UNIVERSITY OF WISCONSIN-MADISON

Happy Embryonic Stem Cells 20th anniversary!

Fall 2018

SCRMC's New Associate Director



[Randolph Ashton](#), assistant professor of biomedical engineering, is the new associate director for the Stem Cell and Regenerative Medicine Center. He joins [Timothy Kamp](#), center director and professor of medicine, cell and regenerative biology, and succeeds [William Murphy](#), Harvey D. Spangler Professor of biomedical engineering and SCRMC co-director from 2012 to 2018. [Read more here.](#)

Featured Researcher: J. Carter Ralphe



[Key populations and iPS cells may illuminate causes of hypertrophic cardiomyopathy](#)

by Jessica Knackert, SCRMC editorial intern

Every day, campus scientists are conducting exciting new research, and much of this research is featured during the SCRMC campus stem cell seminars held every Tuesday at the Discovery Building. To kick off the fall semester, Chief of Pediatric Cardiology and Pediatric Heart Program Director [J. Carter Ralphe](#) presented his lab's studies on inherited forms of cardiomyopathy, specifically hypertrophic cardiomyopathy. [Read more here.](#)

SCRMC Graduate and Postdoctoral Training Awards

Once again, thanks to the generous support of our donors, we are offering two postdoctoral and two graduate research Training Awards. This program was established in 2008 to recognize and provide support for promising graduate students and postdoctoral fellows conducting stem cell and regenerative medicine research at the University of Wisconsin-Madison. The SCRMC Research Training Awards Program provides unique, interdisciplinary training for future leaders in stem cell and regenerative medicine research. Additionally, this program aims to foster interdisciplinary collaborations among campus investigators. This year's application deadline is Jan. 15, 2019. Award notification is Feb. 15. This program is open to applicants of all citizenships. For more information, [please go here.](#)

SCRMC Fall Conference featured 26 student posters and talks

The eighth annual SCRMC Fall Conference featured 26 student posters, along with eight that were also presented as blitz talks. The conference kicked off with a keynote by Igor Slukvin, M.D., Ph.D., professor of pathology and laboratory medicine at UW-Madison. Slukvin addressed advances in pluripotent stem cell technologies for research and therapy of blood disorders. In the afternoon, Barb Kautz from the Center for Leadership and Involvement shared insights on personal branding and leadership awareness. Marius Wernig, Ph.D., associate professor of pathology at Stanford Institute for Stem Cell Biology and Regenerative Medicine, gave the closing keynote on the induction and maintenance of neuronal identity.



Above are our poster award winners, pictured from the left: **Postdoctoral Researcher Runner-up:** Akhilesh Kumar (*Igor Slukvin lab*); **Graduate Student Award Runner up:** Wallatta Mesquitta (*Igor Slukvin lab*); **Top Blitz Talk, Gregory F. Daniels Travel Award** Christopher Morrow (*Darcie Moore lab*); **People's Choice Award** Patrick Kasl (*Bo Liu lab*); **Top Graduate Student, Gregory F. Daniels Travel Award** Shannon Walsh (*Corrine Henak lab*); **Top Postdoctoral Researcher, Gregory F. Daniels Travel Award** Alexandra Soukop (*Emery Bresnick lab*); **Blitz Talk Runner-up** Brett Napiwocki (*Wendy Crone lab*); and **Top Undergraduate Award** Hannah Moulton (*Bikash Pattnaik lab*).

(continued on the next page)

Featured SCRMC web page

Now in its 10th year, the weekly Tuesday [SCRMC campus lab meeting](#) is organized for the campus stem cell community by Tim Kamp with the assistance of Sue Gilbert and is available to students for credit through the Department of Cell and Regenerative Biology.



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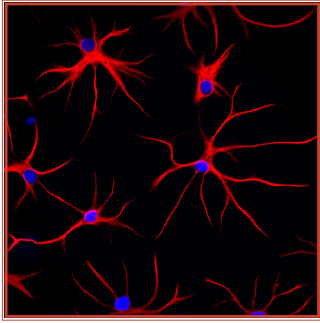
The organizing committee members were our 2018 Research Training Award trainees along with representatives from the Wisconsin Stem Cell Roundtable (WiSCR), pictured from the left with visiting keynote speaker Marius Wernig (Pathology, Stanford University) at far left (*photo above*): Kaivalya Molugu (SCRCM Trainee, Biophysics Program, Saha lab); Andrew Brandl (Cellular and Molecular Pathology, Liu lab); Nisha Iyer (SCRCM Trainee, Biomedical Engineering, Ashton lab); Eileen Lynch (SCRCM Trainee, Comparative Biosciences, Suzuki lab); Scott Bosley (Molecular and Cellular Pharmacology, Bresnik lab); and Pawan Shahi (SCRCM Trainee, Pediatrics, Pattnaik lab). This year, the committee put together a stem cell trivia competition on an app named Kahoot! There were multiple rounds of trivia, most having multiple winners. The top two to three winners of each round received gift cards donated by one of our sponsors. Conference sponsors were WiCell, Peprotech, University Bookstore, ThermoFisher Scientific and Mirus.

Enjoy Sue Gilbert's Fall Conference [photo album here](#).

Fast Fact

There are now approximately 26 clinical trials around the world involving embryonic stem cells and their derivatives. Another 40 trials involve the use of induced pluripotent stem cells. (Source: clinicaltrials.gov)

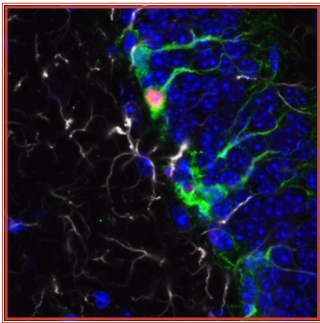
SCRMC Science and Faculty in the News



Astrocytes — derived from human stem cells



Shaoqin Gong



Neural stem cells (green) in adult mouse hippocampus



Summer Camper John Klopatek (right) and Eric Nguyen (left).

- [Mutation in common protein triggers tangles, chaos inside brain cells](#) (Zhang) Oct 23
- [Engineers drawn to stem cells' abundance, humanity](#) (Shusta, Palecek, Murphy, Ashton, Saha) Oct 18
- [WARF announces annual grant figures and innovation award winners](#) (Turng, Skala) Oct 17
- [UW–Madison researchers developing methods to edit genes in brain cells](#) (Gong, Roy, Saha, Emborg) Oct 11
- [Scientists seek to improve quality control for genome editing therapies in the eye](#) (Saha, Gamm, Roy, Skala, Sridharan, Pattnaik) Oct 9
- [Stem cells @ 20: the stem cell and regenerative medicine center galvanizes stem cell research](#) (Thomson, Kamp et al) Oct 2
- [Jacques Galipeau named associate dean for therapeutics development](#) Sept 20
- [Clinical prospects for stem cells begin to emerge](#) (Thomson, Gamm, Kamp, Odorico) Sept 20
- [Initiative focuses on advanced technology innovations in biomanufacturing](#) (Murphy) Sept 6
- [Krishanu Saha receives award for work on retinal mutations](#) Aug 15
- [Bill Murphy to pave new roads to biomanufacturing progress](#) Aug 15
- [Everyday remarkable: behind the scenes with scientist Jianhua Zhang, Ph.D.](#) Jul 15
- [Stem cells shine as Morgridge's rural summer science camps are now underway](#) Jul. 11
- [Cell therapy is the future, and Wisconsin is the place, UW-Madison expert tells technology council](#) (Galipeau) Jun 29
- [Study points researchers toward new therapies for fragile x syndrome](#) (Zhao) Jun 28
- [Jing Zhang named centennial professor of oncology](#) May 30
- [Against the odds: for children with resistant leukemia, immunotherapy offers hope](#) (Capitini, Hematti) May 21
- [UW researchers identify arterial hemogenic endothelial cells that can function as lymphoid precursors](#) (Slukvin) May 18



Save the Dates!



**The 14th Annual Wisconsin Stem Cell Symposium
April 17, 2019**

Stem Cells: Immune Tolerance and Immunotherapy

Sponsored by the University of Wisconsin Stem Cell and Regenerative Medicine Center and the [BioPharmaceutical Technology Center Institute](#) at Promega, this one-day symposium will be anchored by eight leading experts from around world exploring stem cell biology, immune tolerance and immunomodulation. In addition, there will be related poster presentations by trainees from UW-Madison and other universities. SCRMC organizers for next year's symposium are Christian Capitini, M.D., pediatrics, Jacques Galipeau, M.D., medicine, Jon Odorico, M.D., surgery, Kris Saha, Ph.D., biomedical engineering, and Igor Slukvin, M.D., Ph.D., pathology and laboratory medicine.

**[Regenerative Medicine Workshop at Charleston](#)
[March 20-23, 2019](#)**

Synergizing Science, Engineering and Clinical Translation
Wild Dunes Resort, Charleston, SC.



JOIN THE SCRMC

Are you a UW-Madison faculty or staff member, or a student interested in stem cell and regenerative medicine research?

If so, the SCRMC is your central point of contact for information and education, faculty interaction, and facilitation for research and clinical development.

Operating under the [School of Medicine and Public Health](#) and the [Office of the Vice Chancellor for Research and Graduate Education](#), our center's goals are to:

- Maintain UW-Madison as leader in stem cell and regenerative medicine research and application.
- Foster increased communication about the field within campus and beyond.
- Support basic and translational research, clinical application, and sound bioethics and public policy decisions.
- Develop education, training and outreach programs.
- Enhance philanthropic support.

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Please contact [Jordana Lenon](#) if you have trouble reading this newsletter and need a more accessible format. If you supervise staff who do not have easy access to email, please print and post for all to read.

For more updates, join us on [Facebook](#), [Twitter](#), or on our [website](#).

MAKE A GIFT TO THE SCRMC

The University of Wisconsin-Madison is a leader in stem cell and regenerative medicine research, with many landmark discoveries, including the first successful isolation and culture of human pluripotent stem cells in 1998 by James Thomson and colleagues.

We are working hard to uncover the fundamental processes of human health and disease to create revolutionary new therapies for a broad range of diseases.

Won't you join us in our important mission? Thank you for reading and for your support!

Sincerely,
[Dr. Timothy Kamp, Director](#)

[Dr. Randolph Ashton, Associate Director](#)

[Sue Gilbert, Program Administrator, Website](#)

[Jordana Lenon, Outreach, Newsletter Editor](#)

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