

Welcome to our Fall 2017 newsletter. Explore our feature story about our "SURF" students. Check out all our faculty members in the news. Also, visit our new mobile friendly website at <a href="https://www.stemcells.wisc.google.com/www.google.com/

Happy 10th Anniversary, iPS Cells!



We are proud to recognize the 10th anniversary of the <u>successful</u> derivation of induced pluripotent stem cells from human somatic cells, published by <u>SCRMC faculty member James Thomson</u>, <u>V.M.D.</u>, <u>Ph.D.</u>, and his lab team in Science on Nov. 20, 2007. Thomson is a professor of cell and regenerative biology and continues his many research collaborations on campus and beyond as director of regenerative biology at the Morgridge Institute for Research.

(Left) James Thomson with Junying Yu, lead author on the Nov. 20, 2007 Science paper and then assistant scientist at the Genome Center of Wisconsin and the Wisconsin National Primate Research Center. Yu went on to work at Cellular Dynamics International and is now chair of NuwaCell in China. (Bryce Richter image, University Communications.)

Welcome new SCRMC members

The SCRMC welcomes nine new faculty members in the past year: **Grace Boekhoff-Falk**, Ph.D. — Cell and Regenerative Biology; **Timothy Gomez**, Ph.D. — Neuroscience; **Erik Dent**, Ph.D. — Neuroscience; **Corinne Henak**, Ph.D. — Mechanical Engineering; **Patrick Hsieh**, M.D., Ph.D. — Medicine; **Junsu Kang** — Cell and Regenerative Biology; **Ahmed Mahmoud**, Ph.D. — Cell and Regenerative Biology; **J. Carter Ralphe**, M.D. — Pediatric Cardiology; and **Kong "Tony" Wang**, Ph.D. — Medicine. The SCRMC includes over **90 faculty members** from 35 academic departments.

SSSCR Update

More than 40 undergraduate students interested in the <u>Student Society for Stem Cell Research</u> attended its Fall kickoff meeting in the Biochemistry building Sept. 18. The UW-Madison Chapter of SSSCR is now 10 years old, forming in 2007 to help organize the World Stem Cell Summit and Lab on the Lake in Madison, WI, in 2008.

The SURFers' Diaries: Not Your Typical Summer Vacation



by Jordana Lenon

Life may not have been a day at the beach for students in this year's Summer Undergraduate Research Fellowship (SURF) program, but they would not have traded their experiences for anything... and at least one intern still found plenty of time to get outside and enjoy the water.

Angie Xie and Andrew Khalil, Ph.D. students in Bill Murphy's Bioinspired Materials laboratory, facilitated the 2017 SURF program as co-presidents of the Wisconsin

Stem Cell Roundtable (WiSCR). This campus organization of graduate students and post-doctoral trainees operates with guidance and support from the SCRMC and WiCell.

"We changed a few things this year," Angie said of SURF, which completed its fifth summer this year. "We aimed at students who were further along in their studies and who had more biology background. We had better advertising and drew a record 40 applicants." Angie herself was a SURF mentor in 2014.

All four successful applicants are now juniors and continuing to work in their SURF labs for credit. They unanimously expressed that the three months they spent working in SCRMC faculty member labs were incredibly intense, but highly rewarding. They had nothing but praise for their mentors. **Read more**.

Fall Conference Recap



From left to right: Dan Tremmel, Fola Arowolo, Kaivalya Molugu, Zafirah Zaidan, and ChangHwan Lee. (Missing: Brandon Kim.) (Image by S. Gilbert.)

Organizers of the SCRMC's seventh annual SCRMC Fall Conference were pleased to welcome Omer Yilmaz, M.D., Ph.D., from MIT as our external keynote speaker and Krystin Masters, Ph.D., as our internal keynote speaker. The Sept. 15 conference also featured New Technology Short Talks by Scott Brush, VP Sales and Marketing, BRTI Life Sciences; Marian Piekarczyk, M.B.A., Thermofisher Scientific, and Scott Canfield, Ph.D., assistant professor, University of Indiana Medical School and previously a postdoc with SCRMC faculty Sean Palecek and Eric Shusta. This year's organizing committee included SCRMC Training Award winners Brandon Kim, ChangHwan Lee, Daniel Tremmel and Zafirah

Zaidan as well as two representatives from WiSCR, Kaivalya Molugu and Fola Arowolo.

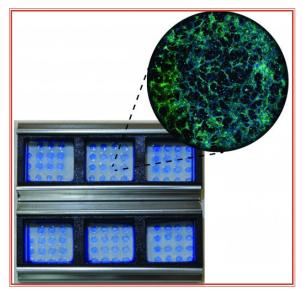
Our Gregory F. Daniels Travel Award poster contest winners were Katherine Mueller (Kris Saha lab) and Diya Binoy Joseph (Chad Vezina lab). Hunter Johnson (Bill Murphy lab), won the ThermoFisher Scientific Outstanding Undergraduate Poster Award.

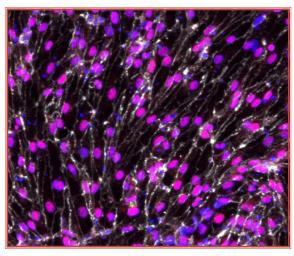
Check out all of the **SCRMC Fall Conference photos** by Sue Gilbert and Jordana Lenon.

SCRMC Science and Faculty in the News



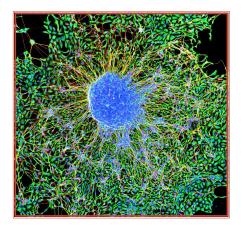






- WARF announces annual grant figures and Innovation Award winners, Oct 18
- <u>UW-Madison to partner in \$20 million</u> <u>cell-based therapy center</u>, Sept. 12
- BioForward announces winners of third annual Wisconsin Biohealth Awards (Allen-Hoffmann), Sept. 8
- Nirupama Pike named director of new cell therapy program, Sept. 6
- <u>UW-Madison summer science camp</u> gives rural students a taste of life in the lab (Kamp, Murphy), July 29
- Advance furthers stem cells for use in drug discovery, cell therapy (Murphy, Nguyen, Daly), July 14
- Stem cell advance brings bioengineered arteries closer to reality (Thomson, Jue Zhang), July 10
- Old bones lead to new strategy for drug delivery (Murphy, Yu), July 4
- Connecting the dots: A new method to understand cell type transitions (Sridharan, Roy), July 3
- Remembering Patricia Keely: Scientist, Mentor, Friend and Inspiration, June 28
- "He has become very famous for his work on stem cells": A scientist, a second grader and stem cells (Thomson), June 20
- Department of Medicine faculty members awarded <u>UW2020 funding</u> (Hematti, Raval), June 7
- Mallinckrodt Enrolls First Patient in Phase 3 Trial of StrataGraft® Regenerative Skin Tissue (Allen-Hoffmann), June 7
- Stem cells yield nature's blueprint for body's vasculature (Slukvin, Kumar), May 30
- Seminar strengthens ties between UW-Madison and fellow Wisconsinites (Skala), May 24
- <u>Combating Pancreatic Cancer with</u>
 <u>Wisconsin Dream Teams</u> (Skala), May 23.
- Patient's cells used to replicate dire developmental condition (Shusta, Palecek), May 16
- Murphy to lead Grainger Institute for Engineering's biomanufacturing thrust, May 2

Save the Dates!



March 21-24, 2018

Regenerative Medicine Workshop at Charleston

Synergizing Science, Engineering, and Clinical Translation

Co-sponsored by the SCRMC and including Randolph Ashton,
Ph.D., William Murphy, Ph.D., Sean Palecek, Ph.D., and Krishanu
Saha, Ph.D., on the scientific organizing committee.

Abstracts due Dec. 7, 2017.

Discounted registration through Feb. 14, 2018.

April 18, 2018

13th Annual Wisconsin Stem Cell Symposium "20 Years of Human Pluripotent Stem Cells: Current Clinical Trials and Regulatory Framework"

BioPharmaceutical Technology Center Institute

More information forthcoming.

June 20-23

ISSCR 2018, Melbourne, Australia

Abstract submission and registration open Dec. 6.

Fast Fact

Now in its fifth year, the SURF program has served 22 interns through 22 mentors in 16 SCRMC member labs. What is SURF? Read our <u>SURF feature story in this issue to learn more.</u>

Check out our new look



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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For more updates, join us on <u>Facebook</u>, <u>Twitter</u>, or on our <u>website</u>.

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.

As you can read in our SCRMC 2017 Update, we are working hard to uncover fundamental processes of diseases and advance better treatments.

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

Sincerely,

Dr. Tim Kamp, Co-Director

Dr. Bill Murphy, Co-Director

Sue Gilbert, Program
Administrator, Website

Jordana Lenon, Outreach,
Newsletter Editor

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