BenchMarks 2008, September 26

The Rockefeller University

Follow this and additional works at: https://digitalcommons.rockefeller.edu/benchmarks_2008
New faculty member studies cancer metastasis

by ZACH VIEILLEUX

Sohail Tavazoie, a physician-scientist whose research focuses on the molecular basis of cancer metastasis, has been named assistant professor and will join Rockefeller University as head of the Laboratory of Systems Cancer Biology in January 2009. Dr. Tavazoie, a native of Tehran, Iran, first developed an interest in science research in high school, when he took a Howard Hughes Medical Institute-sponsored summer course on bacterial genetics at the University of Utah. He considered a career in clinical medicine but found himself drawn to the lab even as he trained as a physician. He received his Ph.D. from Harvard University and his M.D. from the Harvard-MIT Division of Health Sciences and Technology, both in 2003. Following his internship and residency, in internal medicine, at Brigham and Women’s Hospital, he joined Memorial Sloan-Kettering Cancer Center, where he has been a postdoc since 2006, as the laboratory of Joan Massagué.

“I am extremely enthusiastic to have Sohail join the university as our newest junior faculty member,” says Paul Nurse, the university’s president. “His research has the potential to help alleviate suffering associated with humankind’s deadliest diseases, and his approach to the problem of tumor metastasis takes advantage of the interdisciplinary and translational research programs which have long been Rockefeller’s strengths.”

Dr. Tavazoie has devoted his fledgling career to understanding what happens to cancer cells that cause them to break away from a tumor and travel to critical organs such as the lungs, liver and brain, leading to organ failure and eventually death. This process, metastasis, is the key factor in cancer treatment failure and cancer mortality. “When one thinks of solid cancers, the overwhelming cause of death is metastasis,” Dr. Tavazoie says. “I’m interested in understanding the regulatory mechanisms that promote the metastatic process.”

Dr. Tavazoie’s research has led to the identification of three important microRNAs that regulate key genes that are active in cancer metastasis. He undertook a systematic analysis of more than 450 microRNAs in cells derived from human breast tumors and discovered two that suppress migration and invasion of metastatic cells and one that suppresses their proliferation and growth. Further work led to the discovery of two target genes on which one of these microRNAs acts, and that are required for metastasis in breast cancer; the cancer on which Dr. Tavazoie has focused thus far.

“When you look at clinical tumors at time of initial diagnosis, those patients whose tumors lose expression of these microRNAs are significantly more likely to develop future metastasis,” Dr. Tavazoie says. “They are prognostic.”

At Rockefeller, Dr. Tavazoie will pursue this line of inquiry using a systems biological approach that integrates molecular, cellular, animal and clinical observations with the goal of identifying and characterizing key molecular regulators as well as extending the work to other cancers, particularly colon cancer. Ultimately, the research could lead to better tools for identifying patients at high risk for metastatic relapse, as well as better therapies for the prevention and treatment of metastasis.

“Rockefeller is unique as an institution where fundamental basic discoveries have gone on to dramatically shape the diagnosis, management and treatment of human disease,” says Dr. Tavazoie. “The ability to approach a difficult problem in an environment with such a wide range of expertise allows one to think outside the box and would be of benefit to any scientist. I am honored to have been asked to come here.”

FROM PAUL NURSE

Signs, screens and panels

In the coming months we will be unveiling several new initiatives aimed at improving some of the public areas — and making them easier to navigate and somewhat more useful.

The first of these initiatives, which has been in place since early September, is an exhibit in the lobby of Caspary Auditorium highlighting Rockefeller’s current and historical Nobel and Lasker prize winners. The exhibit consists of translucent glass panels picturing each of the 36 prize-winning scientists, together with information about the discoveries that led to the awards. Not only is it a showcase of the individual achievements of our faculty over the years, it also represents the progression of biomedical science in the last century.

continued on page 3
Green Task Force, have also expanded the university’s green initiatives. Together, the university’s green initiatives include mandating that the doors of main entrances remain closed when not in use. The increased use of green bins (for mixed paper and cardboard) and blue (for cardboard, certain plastics, glass and aluminum) has resulted in a 100% increase in the amount of recyclable materials collected on campus, to two tons a month. Plant Operations and Custodial Services jointly oversee the policy to ensure that garbage and recyclables are no longer mixed. “The city sanitation department has strict rules about what recyclables they’ll take, so even a cup of coffee accidentally thrown into a recycling bin means everything in that bin becomes garbage,” says Roland Volcy, assistant manager of custodial services. “If everyone does their part, we can reduce our waste even further.”

Efforts by Restaurant Associates to promote use of reusable bags in Weis Café has led to an additional decrease in garbage — more than 28 percent between 2006 and 2007 and another 14 percent last year.

In December, Communications and Public Affairs announced an opt-out system for printed materials. This year, 10 percent of the campus has opted to stop receiving hard copies of BenchMarks, the Peggy Rockefeller Concerts brochure, the university phone directory, and the Josoph Neighborhood Guide.

GARBAGE

The ongoing campaign to reduce, reuse and recycle at Rockefeller has a substantial boost this year with an increase in the number of recycling bins in offices, hallways and building common areas. The increased use of green bins (for mixed paper and cardboard) and blue (for cardboard, certain plastics, glass and aluminum) has resulted in a 100% increase in the amount of recyclable materials collected on campus, to two tons a month. Plant Operations and Custodial Services jointly oversee the policy to ensure that garbage and recyclables are no longer mixed. “The city sanitation department has strict rules about what recyclables they’ll take, so even a cup of coffee accidentally thrown into a recycling bin means everything in that bin becomes garbage,” says Roland Volcy, assistant manager of custodial services. “If everyone does their part, we can reduce our waste even further.”

Efforts by Restaurant Associates to promote use of reusable bags in Weis Café has led to an additional decrease in garbage — more than 28 percent between 2006 and 2007 and another 14 percent last year.

In December, Communications and Public Affairs announced an opt-out system for printed materials. This year, 10 percent of the campus has opted to stop receiving hard copies of BenchMarks, the Peggy Rockefeller Concerts brochure, the university phone directory, and the Josoph Neighborhood Guide.

CLIMATE CHANGE

Because there’s no need for air conditioning when there’s nobody around to need it, Columbia University, The Cooper Union, Fordham University, The New School, New York University, Pratt Institute and St. John’s University, Rockefeller University pledged to reduce its carbon dioxide emissions by 30 percent by 2017. “We are committed to this goal, just like all the other initiatives we’ve put in place,” says Alex Kogan, associate vice president for physical facilities and housing, who, with Amy Wilkerson, associate vice president for real estate support, represents Rockefeller in the mayor’s program. “Rockefeller has so far been a leader in the community when it comes to eco-consciousness, and we aim to continue leading — by example.”

Here, an update on what’s been accomplished and what’s in the works.
This is an ideal place for an exhibit of this nature as it’s an area of our campus which sees a great deal of traffic from visitors and guests, and it will be of particular value to Development in their fundrais-
ing efforts. We’ve made some other changes to the area, including new lighting to improve the ambiance of the auditorium as well as to draw atten-
tion to the exhibit. (The north end of the auditorium itself was refurbished over the summer, with a fresh coat of paint, a new podium and projector and repairs to the seats.)

A second recent initiative is the installation of flat-panel monitors in Abby Aldrich Rockefeller Lounge and the entrance to Weiss Research Build-
ing. These screens, wired to the campus network, will display information about upcoming events and campus an-
nouncements. They can be used to show live feeds of events in Caspary Auditori-
um and to disseminate critical informa-
tion in case of an emergency, and they will be used by Development in the presentation of information about Rockefeller to guests at their events.

Finally, work is under way on a pro-
ject that should alleviate confusion experienced by many of our first-time and infrequent visitors who arrive on

campus to be greeted by a maze of pathways and unidentified buildings. We are working with a firm which specializes in wayfinding systems to create a series of signs to mark key buildings. In the coming months, they will produce signs depicting our buildings and two information kiosks featuring a campus map, one near the gate at 66th Street and one on the Peggy Rockefeller Plaza. The design of the signs, which will feature silk-
crreened information on brass, should integrate with our existing landscaping and architecture. We will also expand this wayfinding system to include direc-
tional signage on the pathways and in the tunnels when the construction on the north end of campus is complete.
A newly nine-foot-wide painting of Rockefeller president Paul Nurse, by acclaimed British artist Jason Brooks, has been made part of the permanent collection of the National Portrait Gallery in London. Mr. Brooks achieved a high level of precision by using acrylic paints and an airbrush, working from large-format photographs he took himself. From a distance, the painting is sharply defined, but close up it is a mass of abstracted forms, an attempt, in the artist’s words, “to get lost in somebody’s structure.” Jason Brooks studied at Chelsea College of Art and Chelsea College of Art in London. He has won numerous prizes and exhibits regularly at Stellan Holm Gallery in New York.

Milestones

Promotions, Awards and Personnel News

Awardees:
Laura Banaszynski, a 2009 Nobel Laureate Signature Award for Graduate Education in Chemistry, from the American Chemical Society.
Matthew Evans, Valerie Horsley, Andreas Keller and Tom W. Maier, finalists in the Blavatnik Awards for Young Scientists competition. Dr. Evans, a postdoc in Charles M. Rice’s Laboratory of Virology and Infectious Disease, Dr. Horsley, a postdoc in Elaine Fuchs’s Laboratory of Mammalian Cell Biology and Development, and Dr. Keller, a research associate in Leslie B. Voshall’s Laboratory of Neurogenetics and Behavior, were named in the postdoctoral competition. They each receive $5,000 and go on to compete for an additional $15,000. Dr. Maier, head teacher, Child and Family Center.
Valerieya Gaysinskaya, research assistant, Rice Lab.
Fraser Glickman, director, High Throughput Screening Resource Center, and research assistant professor, Office of Academic Affairs.
Andrew Gordan, postdoctoral associate, Bargman Lab.
Kolbe Hancock, research assistant, Greengard Lab.

Michelle Lowes, a Clinical Scientist Development Award from the Doris Duke Charitable Foundation. The award provides $135,000 a year for three years.

Fernando Nottebohm, a 2008 McKnight Technological Innovations in Neuroscience Award, for work that aims to develop a technique for creating transgenic songbirds. Dr. Nottebohm’s laboratory of the Laboratory of Animal Behavior, is one of four recipients of the prize, which comes with $200,000 over two years.

Named:
Margaret R. MacDonald, a member of the Rockefeller University’s Section of the Center for Scientific Review at the United States Department of Health and Human Services. Dr. MacDonald is a research associate professor in David D. Hov’s Airon Diamond AIDS Research Center laboratory and in Charles Rice’s Laboratory of Virology and Infectious Disease.

Hired:
Michael Aikins, campus porter, Housing Student Dormitories.
Daniel Alexander, administrative assistant, Investments.
Steven Alfano, senior systems administrator, Information Technology.
Peter ABF, postdoctoral associate, Paparazzi Lab.
Nirosannah Anandasabapathy, postdoctoral fellow, Steinman Lab.
Jessica Baylor, research assistant, Leibler Lab.
Amanda Beck, postdoctoral associate, Comparative Bioscience Center.
Marie-Madeleine Calz-Grierson, visiting scientist, Blonder Lab.
Jooyun Lee, instructor in clinical investigation, Coller Lab.
Sarah Lee, development associate, Development.
Anthony Licausi, electrical helper, Plant Operations Maintenance Shop.
Emily Mandel, office administrator, Technology Transfer.
Maria Mariantogli, instructor in clinical investigation, Blonder Lab.
Andreas Mauer, instructor in clinical investigation, Coller Lab.
Amy Messerer, science writer, The Rockefeller University Press.
Shelby Moore, administrative assistant, Comparative Bioscience Center.
Mathias Munschauer, foreign research intern, Tsichl Lab.
Gen Murakami, postdoctoral associate, Pfaff Lab.
Charles Nakar, visiting fellow, Coller Lab.
Peter Olds, research assistant, Steinman Lab.
Hilary Osheroff, postdoctoral associate, Hatten Lab.
Naoki Oshimori, postdoctoral fellow, Fuchs Lab.
Benjamin Otpakhlin, research associate, Heintz Lab.
Mina Pastajga, instructor in clinical investigation, Fischer Lab.
Chandraka Patel, data entry assistant, Finance Controllers Office.
Alex Pitts-Klefer, visiting student, Krueger Lab.
Katya Prakash, research assistant, Voshall Lab.
Lijanna Radovíc, teacher, Child and Family Center.
Steven Reizenweber, research assistant, de Lange Lab.
Nicholas Riedinger, helpdesk and computer support specialist, Information Technology.
Teresa Rivera, visiting student, Futabuki Lab.
Olympia A. Robinson, assistant director, Child and Family Center.
Evan Rodgers, security guard, Security.
Jacob Rosenberg, research assistant, Steinman Lab.
Dibyendu Roy, senior Oracle payroll analyst, Information Technology.
Ingrid Salas, medical staff services coordinator, Hospital Regulatory Affairs.
Andrew Schile, postdoctoral associate, Steller Lab.
Jessica Spitzer, postdoctoral associate, Tsichl Lab.

Sriram, postdoctoral associate, Leibler Lab.
Devendra Srivastava, postdoctoral associate, Dantzig Lab.
Magali Suzanne, visiting scientist, Steller Lab.
Melvin White, animal attendant, Comparative Bioscience Center.
Jeanette Wicklein, research assistant, Shaham Lab.
Andrew Williams, research assistant, Simon Lab.
Shawniqua Williams, visiting medical student, Coller Lab.
Maria Wolodynyk, analyst, Investments.
Jongchwan Woo, postdoctoral fellow, Chua Lab.
Andy Yuan, research assistant, Hang Lab.
Chaoxin Zhu, postdoctoral associate, Dantell Lab.
Juliet Zhang, research assistant, Heintz Lab.

Promoted (academic appointments):
In Cheol Jang, to research associate, Chua Lab.
Abigail Matthews, to senior research associate, Ott Lab.
Claudia Mertens, to senior research associate, James Dantell Lab.
Andrew Xiao, to research associate, Allis Lab.

Promoted (staff):
Jennifer Ashlock, to university print production specialist, Communications and Public Affairs.
Alexander Cardia, to development assistant II, Development.
Kim Ming Cheung, to assistant director plant operations finances, Plant Operations.
Jacqueline Chiappetta, to administrative coordinator, Steinman Lab.
Camille Cloverey, to copy editing coordinator, The Rockefeller University Press.
Amy Corney, to special events coordinator, Communications and Public Affairs.
Sylvia Cuadrado, to senior manuscript coordinator, The Rockefeller University Press.
Kelsey Dixon, to development associate, Development.
Fay Dmitriev, to senior applications manager, Information Technology.
Brian Dougherty, to board relations and academic programs associate, Corporate Secretary.
Alice Dyer, to supervisor of glasswashing services, Glasswashing Services.
Kennisha Farrell, to project coordinator, Communications and Public Affairs.
Lindsay Hollander, to supervising manuscript coordinator, The Rockefeller University Press.
Angela Howell, to skilled laboratory helper, Glasswashing Services.
Jennifer Jackson, to program assistant, Sponsored Research and Program Development.
Sachie Kadam, to assistant safety officer, Laboratory Safety and Environmental Health.
Nina Katis, to purchasing agent, Purchasing.
Artemis Khatchian, to research specialist, Krueger Lab.
Sergey Khomuk, to Oracle technical financial lead, Information Technology.
Christine LAU, to research assistant, Heintz Lab.
Naomi Lingenhol, to assistant manager, Comparative Bioscience Center.
Kimberly Lovelace, to associate director, Investments.
Lu A. Liu, to research support specialist, Transgenic Services.
Christopher Maurio, to human resources associate, Human Resources.
Valentina Matharu, to project manager, Planning and Construction.
Alison North, to senior director, Bio-Imaging Resource Center.
Inna Noviatskaya, to research specialist, Krueger Lab.
Shauna O'Carra, to production editor, The Rockefeller University Press.
Barbara O'Sullivan, to medical director, Hospital Medical Direction.
Jennifer O'Connor, to assistant, Rice Lab.
Evangelia Papadimas, to administrative assistant, Young Lab.
Sudee Sree Parambil Sreedhara, to senior research assistant, Development.
Svetlana Zarubina, to human resources assistant, Development.
Nancy Zervos, to senior director, clearinghouse.
Peter Zervos, to senior director, communications and public affairs.
Svetlana Zarubina, to applications development, Information Technology.
Srikanth, to administrative manager, Rice Lab.
Lara Smith, to senior prediag coordinator, The Rockefeller University Press.

Promotion:
Peter Zervos, to senior administrative officer, The Rockefeller University Press.
Karl Ramos, to senior manuscript coordinator, The Rockefeller University Press.
Jason Rothauer, to assistant production editor, The Rockefeller University Press.
Irina Shimelovich, to research specialist, Steinman Lab.
Laura Smith, to senior prediag coordinator, The Rockefeller University Press.
Nicole Stokes, to laboratory manager, Fuchs Lab.
Brenna Trout, to development assistant II, Development.
Christopher Vancil, to identity management and business process engineer, Information Technology.
Svetlana Zarubina, to applications development manager, Information Technology.
Peter Zervos, to senior grants accountant, Finance Accounting Services.
Lili Zhang, to office administrator, Rice Lab.

This publication lists new hires, awards and promotions. Staff promotions are listed yearly, academic promotions and appointments are listed monthly.