Gene Regulatory Mutation Linked to Rare Childhood Cancer

May 12, 2016

Peter Lewis

A single defect in a gene that codes for a histone — a “spool” that wraps idle DNA — is linked to pediatric cancers in a study published in the journal Science.

School of Medicine and Public Health to Collaborate on $5.5 Million Alzheimer’s Study

May 5, 2016

Barbara Bendlin, PhD, Shi-Jiang Li, PhD

The University of Wisconsin School of Medicine and Public Health will collaborate with the Medical College of Wisconsin on a four-year, $5.5 million grant from the National Institutes of Health’s (NIH) National Institute on Aging to study Alzheimer’s disease.

Milwaukee Foundation Supports Early-career Faculty’s Innovative Research

May 26, 2016

Feyza Engin, Srivatsan Raman

For their distinct and innovative molecular research, two University of Wisconsin–Madison scientists have earned Shaw Scientist Awards from the Greater Milwaukee Foundation.

Novel Mouse Model Sheds New Light on Autism Spectrum Disorder

June 3, 2016

Luigi Puglielli

A new mouse model, developed by researchers at the University of Wisconsin–Madison, is the first to show that when more of a specific biological molecule moves between different parts of nerve cells in the mouse brain, it can lead to behaviors that resembles some aspects of autism spectrum disorder (ASD) in humans.

Peter Lewis Named Pew Scholar in Biomedical Sciences

June 10, 2016

Federico Eugenio Rey, PhD

At UW–Madison, exploration of the microbiome is occurring in many different labs and contexts, ranging from surveys of the microbiomes of the bat wing, copepods and Lake Michigan algae to the gut microbiomes of the Wisconsin high school class of 1957 as part of the Wisconsin Longitudinal Study (WLS).

UW-Madison Seeks to Capitalize on Push to Harness Helpful Microbes

June 14, 2016

Federico Eugenio Rey, PhD

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Study Finds Restricting Certain Amino Acids Improves Metabolic Health

June 23, 2016

Dr. Dudley Lamming

Madison, Wisconsin - Humans and mice seem to agree: not only do low-protein diets show significant health benefits, but protein quality matters as much as amount.

Lifestyle Factors May Drive Alzheimer’s Disease

June 28, 2016

Dr. Barbara Bendlin

Madison, Wisconsin - Life stress, insulin resistance, and poor sleep may be precursors to Alzheimer’s disease, according to University of Wisconsin-Madison research presented this week at the 2016 Alzheimer’s Association International Conference (AAIC) in Toronto.

Lymphoma Immunotherapy Study Shows Why UW Carbone is a Leader in Cancer Virology

July 5, 2016

Dr. Shannon Kenney

It may seem odd at first that there are researchers at the UW Carbone Cancer Center who study viruses, those tiny particles that do not develop cancer themselves because they are not even alive. But when they infect human cells, a subset of viruses can cause their host to develop cancer.

UW Leading Way With Innovative Immunotherapy Trial for Colorectal Cancer

July 15, 2016

Dr. Dusty Deming

Madison, Wisconsin - A UW-Madison physician-scientist who is himself a colon-cancer survivor is about to launch one of the nation’s first tests of using immunotherapy to treat metastatic colon cancer.

Combining Radiotherapeutic with Antitumor Antibody and IL2 to Create a Potent In Situ Cancer Vaccine

July 27, 2016

Paul Sondel, professor, pediatrics

Mario Otto, assistant professor, pediatrics

Bryan Bednarz, assistant professor, medical physics

Macular Degeneration Insight Identifies Promising Drugs to Prevent Vision Loss

July 27, 2016

In a study published this week in the Proceedings of the National Academy of Sciences, a University of Wisconsin-Madison research team pinpoints how immune abnormalities beneath the retina result in macular degeneration, a common condition that often causes blindness.
UW2020: WARF Discovery Initiative Proposals Selected
July 27, 2016
Su-Chun Zhang

Eight proposals involving University of Wisconsin School of Medicine and Public Health researchers are among 14 research and infrastructure projects selected by the UW–Madison Office of the Vice Chancellor for Research and Graduate Education for support from the UW2020: WARF Discovery Initiative.

Acquisition of a Pacific Biosciences DNA Sequencer for UW–Madison Campus
July 27, 2016
Co-principal investigators: John M. Denu, professor, biomolecular chemistry; Colin Dewey, associate professor, biostatistics and medical informatics; David O’Connor, professor, pathology and laboratory medicine; Shelby O’Connor, assistant professor, pathology and laboratory medicine; Caitlin Pepperell, assistant professor, medicine; Michael Sheets, professor, biomolecular chemistry; Rupa Sridharan, assistant professor, cell and regenerative biology; Xinyu Zhao, professor, neuroscience

Early Stage Translational Drug Discovery: Matchmaking UW Biology and Medicinal Chemistry Resources Towards High Impact Compounds and Outcomes
July 27, 2016
• Co-investigator: Michael Hoffmann, professor, oncology
• Collaborators: Laura Knoll, associate professor, medical microbiology and immunology; Paul Sondel, professor, pediatric oncology; John Denu, professor, biomolecular chemistry; Xinyu Zhao, professor, neuroscience; Yongna Xing, associate professor, oncology; Wei Xu, professor, oncology; Robert Striker, associate professor, medicine; Manish Patankar, professor, obstetrics and gynecology; Douglas Weibel, associate professor, biochemistry

Reconstructions of Neural Circuits in Parkinson’s Disease
July 27, 2016
• Principal investigator: Su-Chun Zhang, professor, neuroscience
• Co-principal investigators: Marina Emborg, associate professor, medical physics; Bradley Christian, associate professor, medical physics

Carbone Cancer Center Opens Nation’s Largest Precision-Medicine Trial
July 29, 2016
Dr. Dusty Deming, Dr. Kari Wisinski
Madison, Wisconsin - Patients at the University of Wisconsin Carbone Cancer Center can now enroll in the nation’s biggest trial of precision medicine that targets the genetic mutations that drive their cancer.

Shared Live Cell Imaging Resources for Studying HIV/AIDS
July 27, 2016
• Principal investigator: Nathan Sherer, assistant professor, oncology
• Co-investigators: Bill Sugden, professor, oncology; Jenny Gumperz, professor, medical microbiology and immunology; David O’Connor, professor, pathology and laboratory medicine; Shelby O’Connor, assistant professor; pathology and laboratory medicine; Robert Striker, associate professor, medicine; David Evans, professor, pathology and laboratory medicine; Eric Johannsen, assistant professor, medicine; Shannon Kenney, professor, oncology

Monkey study shows Zika infection prolonged in pregnancy
July 27, 2016
Dr. O’Connor/Zika

UW Launches $15 Million Research Effort on Head and Neck Cancer
August 5, 2016
Dr. Paul Harari
Madison, Wisconsin - The University of Wisconsin Carbone Cancer Center has been awarded a five-year, $12 million Specialized Programs of Research Excellence (SPORE) grant from the National Cancer Institute to improve treatments and outcomes for head and neck cancer patients.
UW Carbone Researchers Report Myeloma Advance
August 17, 2016
Dr. Fotis Asimakopoulos

Madison, Wisconsin - A research team from the University of Wisconsin Carbone Cancer Center has discovered a way to make the cancer cells of multiple myeloma more vulnerable to immunotherapy.

$15 Million Grant to Study How Environmental Exposures Affect Childhood Asthma
September 22, 2016
Dr. James Gern

Madison, Wisconsin - The National Institutes of Health (NIH) has awarded the University of Wisconsin School of Medicine and Public Health a two-year, $15 million grant to establish and oversee the Children’s Respiratory Research and Environment Workgroup (CREW) - a national consortium of 14 institutions that will study how genetics interact with environmental exposures during the prenatal and early childhood years to cause specific subtypes of childhood asthma.

UW Research Team Identifies Mechanism Driving Leukemia Development
August 18, 2016
Dr. Emery H. Bresnick

Madison, Wisconsin - In another step toward unraveling the causes of serious blood disorders, a UW-Madison research team has identified how a genetic network in certain blood cells can be disrupted and go on to promote the development of certain forms of leukemia.

Researchers Identify Mechanism Controlling Red Blood Cell Development
October 7, 2016
Dr. Emery Bresnick

Madison, Wisconsin - A research team at University of Wisconsin School of Medicine and Public Health has identified how a particular collection of proteins plays a critical role in the development of red blood cells, which carry oxygen to body tissues so organisms can survive.

Dr. David Gamm’s Team Awarded NIH Grant to Reverse Blindness
September 1, 2016

Madison, Wisconsin, A UW-Madison research team has been selected to work on one of six projects aimed at restoring vision by regenerating light-sensing photoreceptor cells in the eye.

Dr. Jacques Galipeau Brings Personalized Stem Cell Treatment to UW Carbone
September 6, 2016

Madison, Wisconsin - An international leader in harnessing a patient’s own stem cells to fight cancer and autoimmune diseases joined the faculty of the University of Wisconsin Carbone Cancer Center on September 1.

Higher Education, Higher Weight Trends Linked with Lower Dementia Rates
November 21, 2016
Dr. Sanjay Asthana

Can staying in school when you’re young and gaining weight when you’re old cut your chances for developing dementia?

Innate Natural Killer T Cell Research Featured in Journal Cell Reports
September 20, 2016
Joshua Coon, David Pagliarini

Proteins are the hammers and tongs of life, with fundamental roles in most of what happens in biology. But biologists still don’t know what thousands of proteins do, and how their presence or absence affects the cell.

Yeast Knockouts Peel Back Secrets of Cell Protein Function
September 26, 2016
Joshua Coon, David Pagliarini

Cardiomyocytes, the beating workhorse cells of the heart, along with endothelial cells and fibroblasts, will be built into a three-dimensional heart patch for testing in a large animal heart attack model.

Study to look at Alzheimer’s Risks in African-Americans
October 3, 2016
Dr. Carey Gleason

Madison, Wisconsin - A large study of Alzheimer’s disease in the African-American community is among those funded in a series of grants awarded to University of Wisconsin School of Medicine and Public Health (SMPH)
Carbone Cancer Center Finds a New Biomarker for Fatal Brain Cancer

October 19, 2016
Dr. Kelli Pointer, Dr. John Kuo

Madison, Wisconsin — A whimsically named gene coding for an ion channel associated with irregular heart rhythm risk may also help predict survival in patients with the most malignant type of brain cancer, according to new research from the University of Wisconsin Carbone Cancer Center.

Gut's Microbial Community Shown to Influence Host Gene Expression

November 23, 2016
Dr. John Denu, Dr. Federico E. Rey

In our guts, and in the guts of all animals, resides a robust ecosystem of microbes known as the microbiome. Consisting of trillions of organisms — bacteria, fungi and viruses — the microbiome is essential for host health, providing important services ranging from nutrient processing to immune system development and maintenance.

Paul Sondel Wins Prestigious Award for Pioneering Cancer Research

December 7, 2016

The Society for Immunotherapy of Cancer (SITC) announced that Sondel, a pediatric oncologist, has received the group’s top award for decades of work in developing immunotherapies for childhood cancers, especially neuroblastoma.

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UW-Led Study Shows Potential Strategy for Treating Aggressive Form of Lymphoma

November 23, 2016
Dr. Lixin Rui

A research team at the University of Wisconsin Carbone Cancer Center has found a new signaling mechanism that contributes to the development of a type of non-Hodgkin’s lymphoma.

To Detect Early Alzheimer’s Disease, Keep White Matter in Mind

Intervening early in Alzheimer’s disease promotes better outcomes for patient care and public health, but sleuthing out the first signals of this disease in the brain has been difficult. Now, there’s new hope: a research team led by Barbara Bendlin, PhD, associate professor, Geriatrics and Gerontology, has capitalized on a new brain imaging method that detects structural changes in white matter, specifically in myelin.

Immunotherapy: Harnessing Cellular Systems to Fight Deadly Diseases

A dedicated army of UW-Madison researchers is perfecting how to use immunotherapy and searching for new ways to do so. Ken DeSantes, MD; Paul Sondel, MD, PhD ‘75 (PG ’80); Peiman Hematti, MD; Christian Capitini, MD; Mario Otto, MD, PhD; Douglas McNeel, MD, PhD; Jacques Galipeau, MD; and many others synergistically have combined forces around the newest frontier in the war on cancer and other diseases.

Collagen Linked to Growth of Breast Cancer Type

February 2, 2017
Daniel Greenspan

Madison, Wisconsin - Researchers at the University of Wisconsin School of Medicine and Public Health have found that removing a specific type of collagen can dramatically reduce the growth of one form of breast cancer.

Coming Soon: Glow-in-the-Dark Cancer Surgery

Dr. Jamey Weichert

A near future when surgeons can see cancer cells glow in the operating room is outlined this week by a team of University of Wisconsin Carbone Cancer Center researchers.

Researchers Map a New Cellular Pathway of Cancer Therapy Resistance

January 3, 2017

“Nuclear localized RTKs can mediate resistance to therapeutics used to treat cancer, such as radiation therapy, chemotherapy or antibody-based therapies that directly block RTKs on the cell surface,” said Dr. Toni Brand, a former UW-Madison CMP graduate student in Dr. Deric Wheeler’s lab and lead author of the study. “We wanted to identify how RTKs move to the nucleus so that we can design therapies to block their transport and hopefully enhance the efficacy of antibody-based therapies in the future.”
Professor honored by American Academy of Microbiology

David Andes, a University of Wisconsin School of Medicine and Public Health professor of medical microbiology, has been elected as a fellow of the American Academy of Microbiology. Formed in 1955, the AAM recognizes outstanding contributions to the microbiological sciences.

Carbone Experts Present Latest Research at World’s Largest Cancer Meeting

Dr. Mark Burkard

Viral Infection Found to Increase Therapeutic Resistance of Glioblastoma Cells

Dr. John Kuo

Poor Sleep Linked to Multiple Brain Changes Associated with Alzheimer’s Disease

Dr. Barbara Bendlin

New Method of Viral Maintenance in Cancer Cells Identified in UW Study

Dr. Bill Sugden

Cell Therapy Could Reduce Bone-Marrow Transplant, Radiation Injury Complications

Dr. Peiman Hematti, Dr. Christian Capitini

A cell-therapy approach first discovered at the UW Carbone Cancer Center (UWCCC) in 2009 may reduce complications from bone marrow transplant (BMT) and radiation injury in the future, according to a new study.

Study Sheds Light on Function of Protein Associated with High-Risk Breast Cancers

Dr. Wei Xu, Dr. Joshua Coon

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Dr. Wei Xu, Dr. Joshua Coon
Graduates & Student News

Student Paper is Editor’s Pick
March 10, 2017
Third year CMP student, Bryce Wolfe’s 1st author paper is an editors’ pick and is featured on the front page of the American Society for Microbiology’s website.

This Year’s Graduates
Summer 2016
Chelsea Hope - Post Doc in Asimakopoulos Lab, UW Madison
Danny LeBert - Post Doc in Huttenlocher lab
Melissa Wilking - Associate Research Scientist at PPD in Middleton, WI
Wei Wang - Post Doc in Sondel Lab

Fall 2016
Bowen Wang (in Ohio) Post Doc in Ohio/Kent Lab
Matt Brown - Postdoctoral T32 Fellowship, with Drs. James Thomson and William Burlington University of Wisconsin, Madison
Zulmarie Perez Horta – AAAS Science and Technology Fellow for the incoming class of 2017-2018, joining the Radiation and Nuclear Countermeasures Program at the National Institute of Allergy and Infectious Diseases, Washington DC

2017
Joseph Ma – Postdoc in the Svaren Lab, UW Madison
Gene Uenishi - Scientist at Casebia Therapeutics, San Francisco Bay Area
Stephanie Lawry - Senior Scientist at PPD in Middleton wi (pharmaceutical product development, Inc.)
Maggie Maes – Post Doc. With Dr. Sandra Siegert at the Institute of Science and Technology (IST) Austria, in Vienna, Austria
Monica Montano – California Council of Science and Technology (CCST) policy fellowship
Pansakorn Tanratana – returning to Thailand for Teaching Position
Chelsie Sievers – starting UW Medical School
Erin Theisen – returns to UW medical school
Mirnal Chaudhary - returns to medical residency
Jose Rodriguez Molina - Moving to Washington DC

Student Conferences
Chelsie Sievers
The American Association for Cancer Research Annual meeting April 1 - 5, 2017 in Washington DC.
I received our internal CMP travel award to attend this meeting.

Monica Montano
I gave an oral presentation at the SACNAS conference in Long Beach, CA this past fall (10/13-10/15). I also received conference presentation funds from the grad school to attend.

Kirst Walker and Caity Holmes
Research Training in Hematology T32 spots:

Kirst Walker
IMMUNOLOGY 2017 Meeting, Washington DC May 11-May 16, 2017
Mengxue Zhang
ATVB meeting 2017 in May 4 – 6, 2017
Mary Lopez
receives American Society for Neurochemistry Young Investigator Educational Enhancement Award (YIEE)

Jeanette Shultz: awards this year:
• Travel award to attend Society for Neuroscience (SfN), San Diego, CA, Nov 12-16, 2016
• Travel award to attend The American Society for Neural Therapy and Repair (ASNTR) conference in Clearwater, FL April 27-29, 2017.
• NIH F31, project titled “ncRNAs and PPARy induced sympathetic neuroprotection in an NHP model of cardiac neurodegeneration”
• CMP Poster Award (used for SfN)
• CMP Travel Award (used for SfN)
• Cardiovascular Research Center (CVRC) Poster Award

Bryce Wolfe
presented a poster at ISOPOL XIX: Problems of Listeriosis at the Pasteur Institute in Paris, France in June 2016
• Attended IFPA (International Federation of Placenta Associations) in Portland, Oregon in September 2016
• Received a National Institutes of Health New Investigator Travel Award for travel to Portland
• Received the Elsevier Placenta New Investigator Award for best oral presentation by an early career researcher.
Graduates & Student News

Student Conferences Continued

Heather Schmitt
• Won top poster presenter award at the Midwest Eye Research Symposium in Iowa City, Iowa in August of 2016
• Won the top abstract award at a talk at the Association for Ocular Pharmacology and Therapeutics conference in Florence, Italy in February of 2017
• Travel award for travel to the Association for Ocular Pharmacology and Therapeutics Meeting where she was invited to publish our work in the Journal of Ocular Pharmacology and Therapeutics

James Romero
• Awarded Cancer Biology T32 spot
• Gave a talk and presented a poster. International Herpesvirus Workshop (IHW), Madison, WI July 23rd-27th

Kirstan Gimse
• Received an NSF GRFP Honorable Mention.
• Travel award from the American Society for Neural Therapy and Repair to attend their conference April 26-30th in Clearwater, Florida

Gene Uenishi
• Cyntara Therapeutics Scholarship Award, International Symposium: Translational Opportunities in Stem Cell Research, International Society for Stem Cell Research, Basel, Switzerland, February 2017

Kongs to CMP Student Jose Rodriguez Molina who was awarded a Professional Development Grant of $1000.00 from the UW Graduate School for his organization, CaSP (Catalysts for Science Policy). CaSP is a student organization that Jose and his wife, CMP graduate Zulmarie Perez Horta, and a few other students organized several years ago. The two founders have now passed the baton to other students but before graduating this spring, Jose took time to submit this final grant.

Incoming Students

Andrew Brandl
University of Wisconsin-Milwaukee 2014
B.S. in Biochemistry
Andrew has an interest in cell therapy. He’s looking forward to learning about transplantation, cell signaling and all aspects of regenerative medicine.

Anna Marie Rowell
University of Oklahoma 2017
B.S. in Biochemistry
Anna Marie is interested in integrating her interests in bacterial pathogens with their established research in pathogenicity mechanisms and epidemiology of emerging diseases.

Anil Kiran Chokkalla
Indian Institute of Technology, Madras; Chennai, 2016
BS in Biotechnology
Anil transferred into CMP in January of 2017 and is currently a member of Dr. Raghu Vemuganti’s lab. Anil will be starting his CMP coursework this fall with the rest of the incoming CMP Students.

Andrew Lynch
University of Wisconsin – Eau Claire 2016
B.S. in Biochemistry and Molecular Biology
Andrew has a special interest in cancer immunotherapy and tumor microenvironments as well as neurodegenerative diseases.

Evan Flietner
University of Wisconsin-Madison 2014
BS in Biochemistry
Evan envisions his future as having his own lab focused on creating the next generation of technology for the diagnosis and treatment of human disease, especially Cancer.

Qijun Zhang
University of Science and Technology of China, 2017
BS Molecular biology/Cancer
Qijun’s stated interests are in Molecular biology/Cancer.

Katie Zarbock
St. Catherine University, MN, 2016
Katie currently expresses an interest in antibiotic resistance as well as research in the intersection of diet, human microbiota and health.