

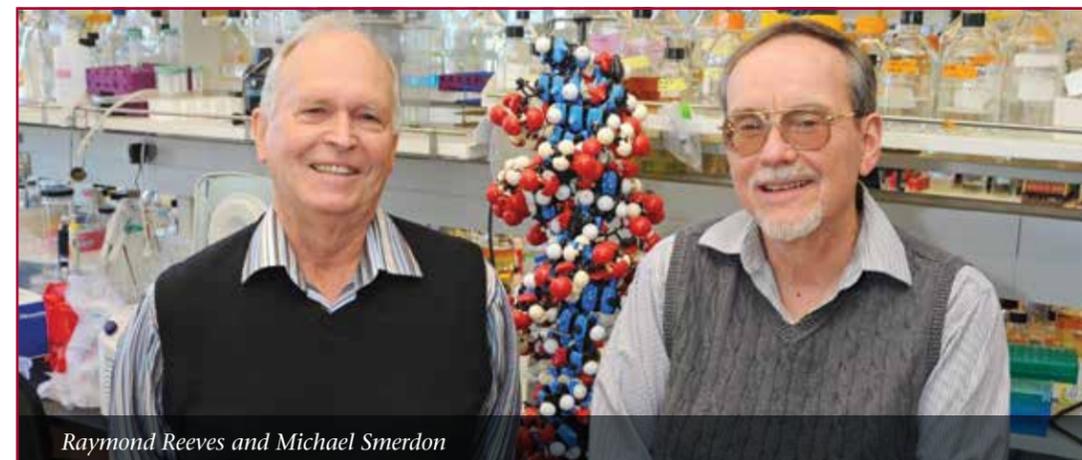
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News and Announcements
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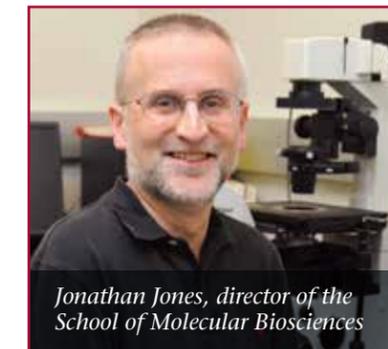


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Raymond Reeves and Michael Smerdon

MESSAGE FROM THE
DIRECTOR



Jonathan Jones, director of the
School of Molecular Biosciences

1st Biennial Chromatin-DNA Repair Lecture Honored the Distinguished Careers of Drs. Raymond Reeves and Michael Smerdon

To honor Drs. Smerdon and Reeves and their long careers and innovative research on how DNA in chromatin influences basic cell functions, the School of Molecular Biosciences hosted the “Smerdon/Reeves Symposium on DNA Repair in Chromatin: The First 40 years (and Beyond)” May 21-23, 2015. The event, which brought prominent speakers from the United States, Canada, and Australia, coincided with the 40th anniversary of the first studies reported on nucleotide excision repair in chromatin. *The Smerdon/Reeves Chromatin-DNA Repair Lecture Fund* at WSU’s School of Molecular Biosciences was created to fund a biennial lectureship and to honor their legacies.

For more information on how you can support this lectureship, visit go.wsu.edu/SmerdonReevesFund

Raymond Reeves is a pioneer in the fields of cell biology and chromatin structure/function. His contributions include the first demonstration that gap junctions are membrane channels used for cell-to-cell communication of small molecules, that the nuclei of adult differentiated skin cells contain all of the genetic information to produce new individuals, and the original isolation and characterization of the genes coding for the High Mobility Group A (HMGA) family of non-histone chro-

matin proteins that regulate gene transcription in both normal and cancerous cells. He has served on numerous National Institutes of Health and National Science Foundation grant panels, and on the editorial boards of a number of international scientific journals. For many years, he served as the director of the NIH Biotechnology Training Program at WSU. He has received numerous honors for his academic and research achievements. He is a fellow of the American Association for the Advancement of Science (AAAS) and his work was recognized as contributing to the 2012 Nobel Prize in Medicine awarded to Professor John Gurdon. More recently, he was chosen to present the WSU Distinguished Faculty Address in 2014. Dr. Reeves retired in July 2015.

Over the course of his career at WSU, **Michael Smerdon**, Regents Professor of biochemistry and biophysics, made impressive contributions to the understanding of DNA damage and repair in chromatin. A recognized leader in the field, he was one of the first investigators to focus on the role of chromatin structure in DNA repair. Dr. Smerdon has extensive experience on the effects of chromatin structure, chromatin modifications, and transcription factor binding on excision repair in both yeast and mammalian cells. He

Summer is the time when I get a chance to review the accomplishments and changes that have occurred in SMB since the academic year began (way back in the fall of 2014!). I can tout the faculty’s success in obtaining grants, no mean feat these days. Congratulations to Drs. Pat Hunt, Terry Hassold, Jon Oatley, Susan Wang, and Eric Sheldon who were awarded new or renewed funds for their research. Several of our senior faculty also retired this year. We wish John Nilson, Ray Reeves, and Nancy Magnuson the very best and thank them for their outstanding service to SMB and WSU over many years. All three now hold emeritus status so they will continue to be involved with the life of the school although, obviously, a little less directly!

Ray and Nancy were on campus in May during the events that accompanied the three day Reeves/Smerdon Symposium. This symposium was a major success and attracted internationally renowned scientists from around the world to Pullman. The scientific aspects of the symposium were focused on DNA repair mechanisms although it also celebrated the remarkable scientific and teaching careers of Drs. Mick Smerdon and Ray Reeves. Indeed, we

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Distinguished Careers *Continued*

*DNA Repair in Chromatin: The First 40 years (and Beyond),
WSU Lewis Alumni Centre, May 21-23, 2015*



was continuously funded by the National Institutes of Health for 36 years. He also received a Research Career Development Award (RCDA) and MERIT award (Method to Extend Research in Time) from the National Institutes of Health. He served on several scientific advisory panels. He received several honors for his academic achievements, most recently being elected to the Washington State Academy of Sciences. And this fall, a special issue *DNA Repair* titled "DNA Excision Repair in Chromatin" will honor his career in the field of DNA repair.

For more information visit go.wsu.edu/DNAsymposium

FROM THE DIRECTOR *Continued*

were very fortunate to welcome back a number of Smerdon and Reeves trainees, some of whom talked at the symposium. I will add my thanks to Diane Smerdon, who not only organized the entire event, but also made sure that it went off without a hitch. The symposium success was certainly due to all of Diane's hard work.

Last summer we welcomed two new faculty, Drs. Alan Goodman and Steven Roberts. It has been a great pleasure to see them establish their labs and get their research programs off the ground. During the year we also undertook a new recruiting cycle and successfully hired two new faculty members: Drs. Joy (Wipawee) Winuthayanon and Rey Carabeo. Dr. Winuthayanon will join us from the National Institute of Environmental Health Sciences in North Carolina as an assistant professor. Joy's research focus is hormonal regulation in the oviduct during fertilization, pre-implantation embryo development, and embryo transport. Dr. Carabeo was recruited from the University of Aberdeen in Scotland where he serves as a senior lecturer in their microbiology program. Rey is a cell biologist working on Chlamydia pathogenesis. He will be an associate professor and will bring with him several of his current lab colleagues.

As we move into a new academic year, I also wish undergraduate coordinator Biddy Bender well on her retirement. She has been assisting all of our undergraduates since 1999. We will miss her larger than life personality and warm welcome in our office.

Reaching for the STARS



When **Travis Kent** was still a high school student in Boise, Idaho, Washington State University was one of his top choices. But it was on a visit to the WSU School of Molecular Biosciences when he was told about STARS, a fast-track program where students can begin as undergraduates and earn a doctorate in seven years,

when he knew this was the place for him.

"I was excited about getting into the lab early and that shifted my decision to come to WSU," said Kent, who in 2016 will earn a doctorate in genetics and cell biology.

With STARS, or Students Targeted toward Advanced Research Studies, students can begin their laboratory training their first year. Each semester and over the summer students receive stipends and the funding allows them to spend time doing their own research, rather than working off-campus.

"Without the STARS program, I wouldn't have been able to work in a lab over the summer," said Kent. "I would have been further behind in my research."

Because he had done lab rotations as an undergraduate, by the time he entered graduate school he was able to focus more on research and he was ahead of other graduate students entering the program.

"I've been working in the lab for six years," said Kent. "I feel better prepared for my exams and I was ahead in my coursework as well."

Kent's research is on how abnormal levels of vitamin A, or retinoic acid, can affect fertility in men. A fat soluble vitamin, retinoic acid levels are affected by an individual's metabolism.

"Half of all infertility cases are men," said Kent. "But in about 50% of those cases, they don't know the cause." His research could lead to different advice by doctors who may prescribe vitamin A to treat acne if it could cause infertility later on.

"I'm passionate about reproductive biology," said Kent.

When he finishes graduate school at just 24 years old, he will have many options in front of him.

"Whether I work in academia, government, or for industry, I haven't decided," said Kent. He is currently planning to pursue three to five years of postdoctoral training after he earns his doctorate.

"After that, I am keeping my options open," said Kent.

For more information about supporting the STARS program visit go.wsu.edu/STARS.

STUDENT NEWS

Kudos to sophomore **Seth M. Schneider** who won the annual Barry M. Goldwater scholarship. The merit-based awards go to college sophomores and juniors in science, engineering, and mathematics who intend to pursue a career in research. Sophomore **Angela R. Rocchi** received honorable mention. Schneider has worked in WSU microbiologist Cynthia Haseltine's lab and is currently working with genomicist Kelly Brayton. Rocchi has worked in WSU biochemist Joseph Harding's lab.



Congratulations to 2015 Wiley Expo winner **Natalie Peer** (right) with her mentor Dr. Kwanhee Kim. Natalie was the second place winner in the medical and life sciences category for her oral presentation. She received a \$500 scholarship.

Congratulations to our 44 undergraduate students who graduated this past spring!

Eighteen earned a degree in biochemistry, six in genetics and cell biology, and 20 in microbiology. Go Cougs!

FACULTY NEWS

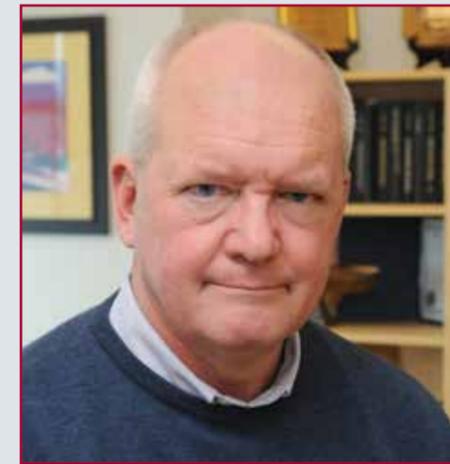
Nancy Magnuson and John Nilson Retire

This spring the School of Molecular Biosciences said farewell to esteemed faculty members Drs. Nancy Magnuson and John Nilson.



Nancy Magnuson was one of the first to identify how the PIM-1 gene, a proto-oncogene, contributes to cancer development. Over nearly 30 years, she also worked with dozens of students, undergraduate and graduate, to help them achieve their academic and professional goals. Magnuson earned her doctorate from WSU in 1978 and joined the WSU faculty as a research assistant professor in 1981. She also served as the director of the NSF funded ADVANCE grant program that promotes the careers of women in the science, technology, engineering, and math (STEM) disciplines in academia. In 2010, Magnuson was selected by her peers to give the WSU Distinguished Faculty Address, one of the University's highest honors, recognizing the achievements of one faculty member in research, scholarship, and teaching. The *Dr. Nancy Magnuson Immunology Scholarship* was established to support students pursuing a degree in immunology and to honor one of the college's most esteemed faculty members.

For more information on how you can support this scholarship, visit go.wsu.edu/MagnusonFund.



John Nilson joined WSU as Edward Meyer Distinguished Professor and director of the School of Molecular Biosciences in 2003. He served as director for a decade before stepping down in 2013 to focus on developing a new umbrella graduate program in the college titled Integrated Programs in Biomedical Science. This summer, he was named a fellow of the Consortium of West Regional Colleges of Veterinary Medicine Teaching Academy. Dr. Nilson, whose research has been funded continuously by the National Institutes for Health for over 34 years, has had a long-standing interest in understanding the molecular mechanisms involved in temporal, spatial, and hormone-regulated expression of the genes in the pituitary that encode reproductive hormones. He has served as the editor-in-chief of *Molecular Endocrinology* and as president of the Society for the Study of Reproduction. He received the Beacon in Reproductive Research Award from the Frontiers in Reproduction Program and the Sidney H. Ingbar Distinguished Service Award from the Endocrine Society. Under his supervision, 14 students completed graduate degrees, and he has trained 19 postdoctoral scientists. Almost all have gone on to successful careers in academics or biotechnology companies. Dr. Nilson plans to retire to Taos, New Mexico.