

Welcome to the Department of Biochemistry and Molecular Biophysics



Washington University in St. Louis
School of Medicine

BMB Length of Service Awards

Melissa Torres, Admin Office, 15 years

Thang Ho, Lohman Lab, 20 years

Changguo Tang, NMR Facility, 25 years

Tom Stump, Greenberg Lab, 15 years

Greg DeKoster, Frieden/Hall Labs 10 years

Congratulations and thank you for your service!

Upcoming Events

Thursday

Tea Time for Faculty, Staff, Postdocs and Students

Every Tuesday and Thursday

Coffee, tea and cookies will be served.

3:00-4:00 pm, Biochemistry Break Room, 201 McD

Farmer's Market

Every Thursday

10:00 am - 2:00 pm, either inside the lobby of the McDonnell Pediatric Research Building, or just outside it

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Upcoming Events

Friday, September 2nd, 2016

BMB Science Friday - Labor Day Happy Hour

Burgers Lab

4:00 PM, 201 McDonnell Sciences

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Friday Sep. 2
4:00 PM
Same Place

July Publication

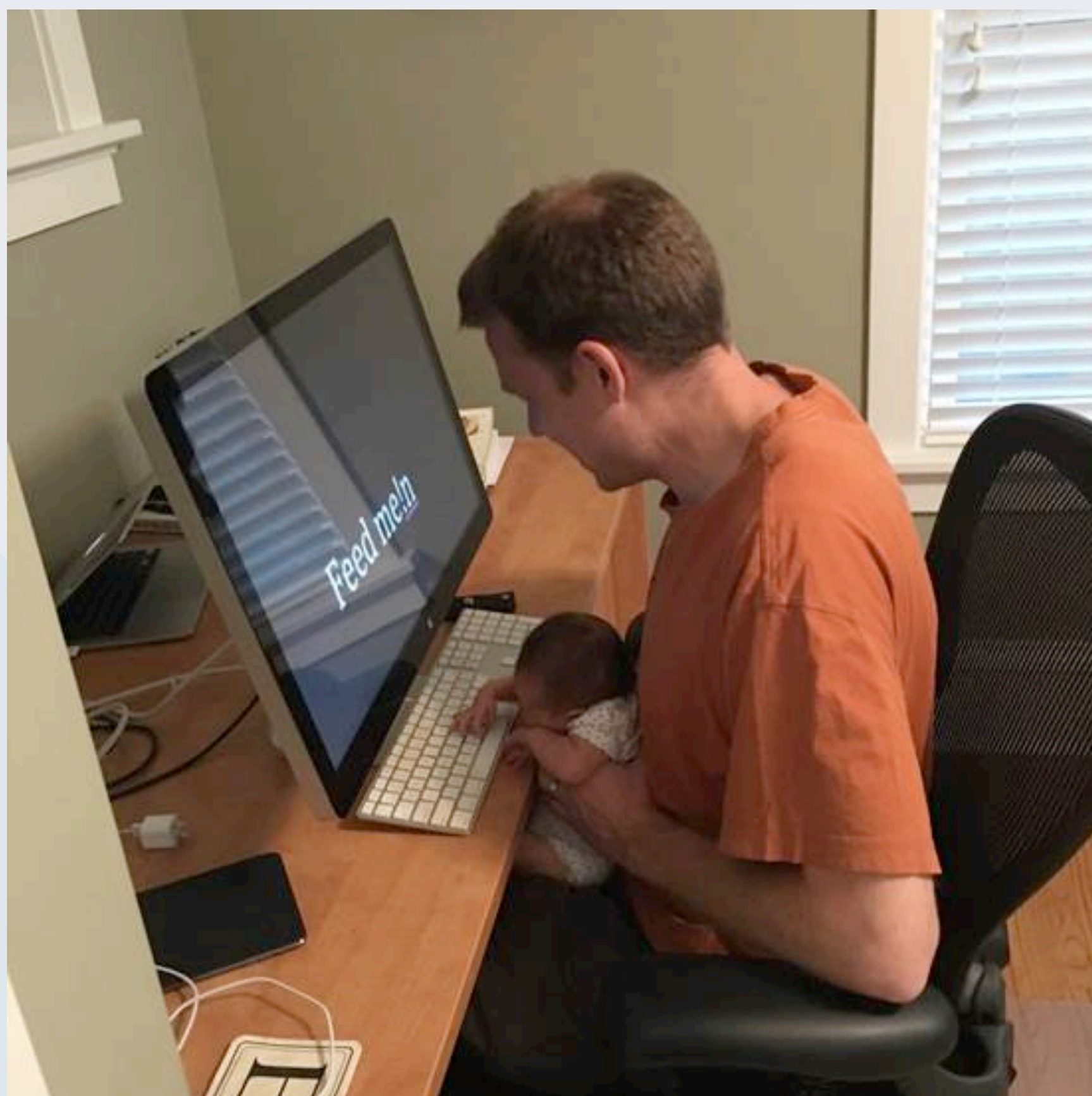


Simon, M., Sokoloski, J., Hao, L., Weiland, E. and **Lohman, T.** Processive DNA Unwinding by RecBCD Helicase in the Absence of Canonical Motor Translocation. *J Molecular Biology* (E-pub ahead of print.) (2016).

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Write-on, Claire!

Claire Bowman, the little taskmaster, arrived 8/14/16 and she's already helping her dad write his DP2 proposal.

Office 365 is Here!

What does this mean?

It means your email will work better and offer more features, you will have access to more cloud services, and you can now install Microsoft Office on all of your computers and devices!

For more information, please visit:

<https://email.wustl.edu/>



July Publication



Krishna, U., Romero-Gallo, J., Suarez, G., Azah, A., **Krezel, A.M.**, Varga, M.G., Forsyth, M.H. and Peek, R.M. Jr.

Genetic Evolution of a Helicobacter pylori Acid-Sensing Histidine Kinase and Gastric Disease. J Infect Dis. (E-pub ahead of print.) (2016).

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Congratulations to Sarem Hailemariam!



Sarem, a graduate student in Dr. Peter Burgers' lab, has been selected for the 2016 Sigma Fellowship in memory of Dr. Gerty Cori.

Sarem received her undergraduate degree in Biology from Shaw University in Raleigh, North Carolina. She joined the Division of Biological and Biomedical Sciences at Washington University in St. Louis in 2012 as part of the Molecular Cell Biology program.

Read more at biochem.wustl.edu/news

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Coming Soon:

WashU Phones to Be Upgraded to VoIP



*** Current handsets will be replaced with Voice over IP (VoIP) phones.**

(The new phones will have all the same features as the old phones but will be connected through the data network.)

*** This project is expected to be finished by July 2017.**

(More info will be provided as the project moves forward.)

*** This project does not affect faxes, emergency lines or elevator phones, and you will keep your current phone number.**

For more info: <https://voip.med.wustl.edu>

Back Up Your Data!

Don't let your important files and data go up in flames!

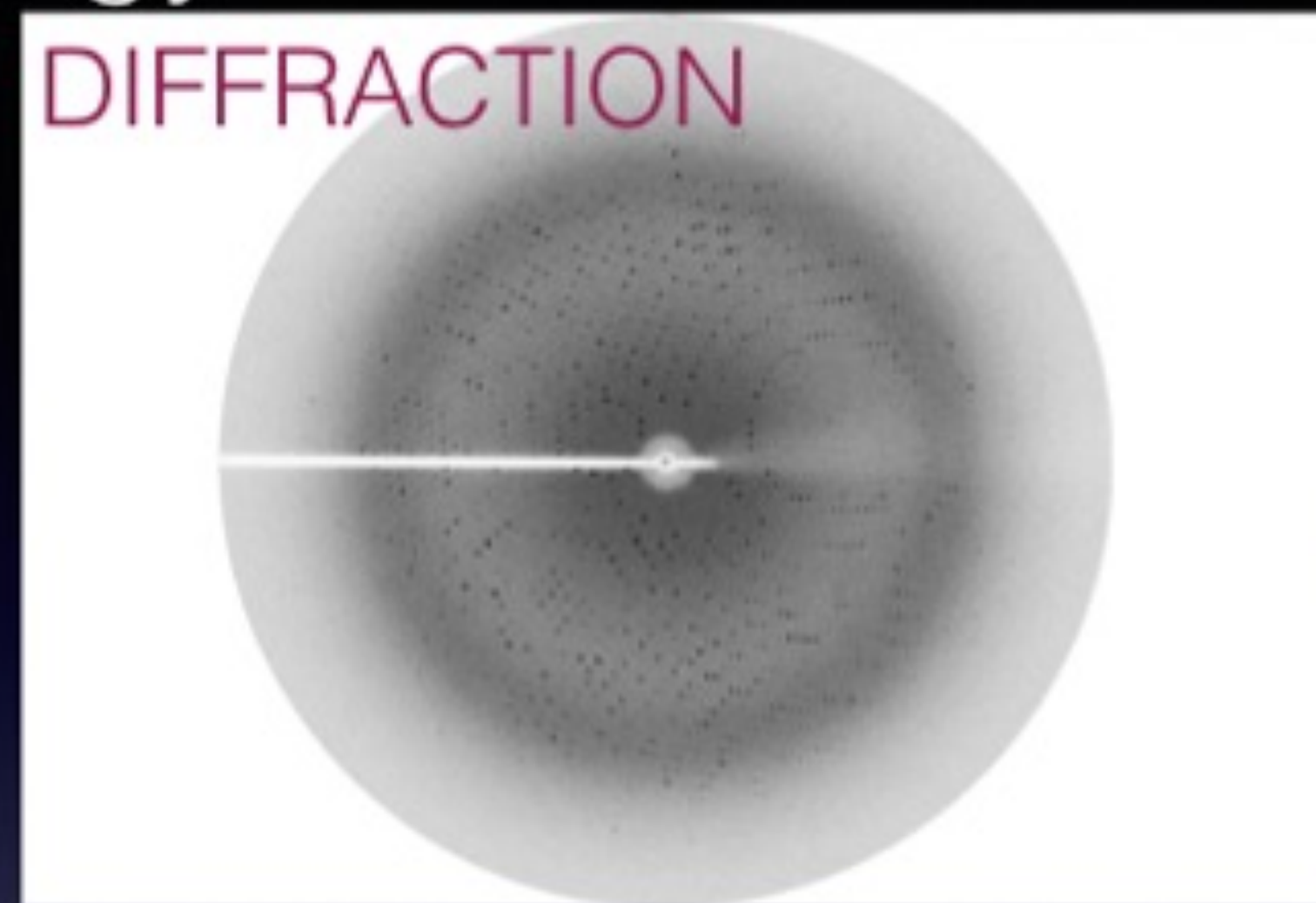
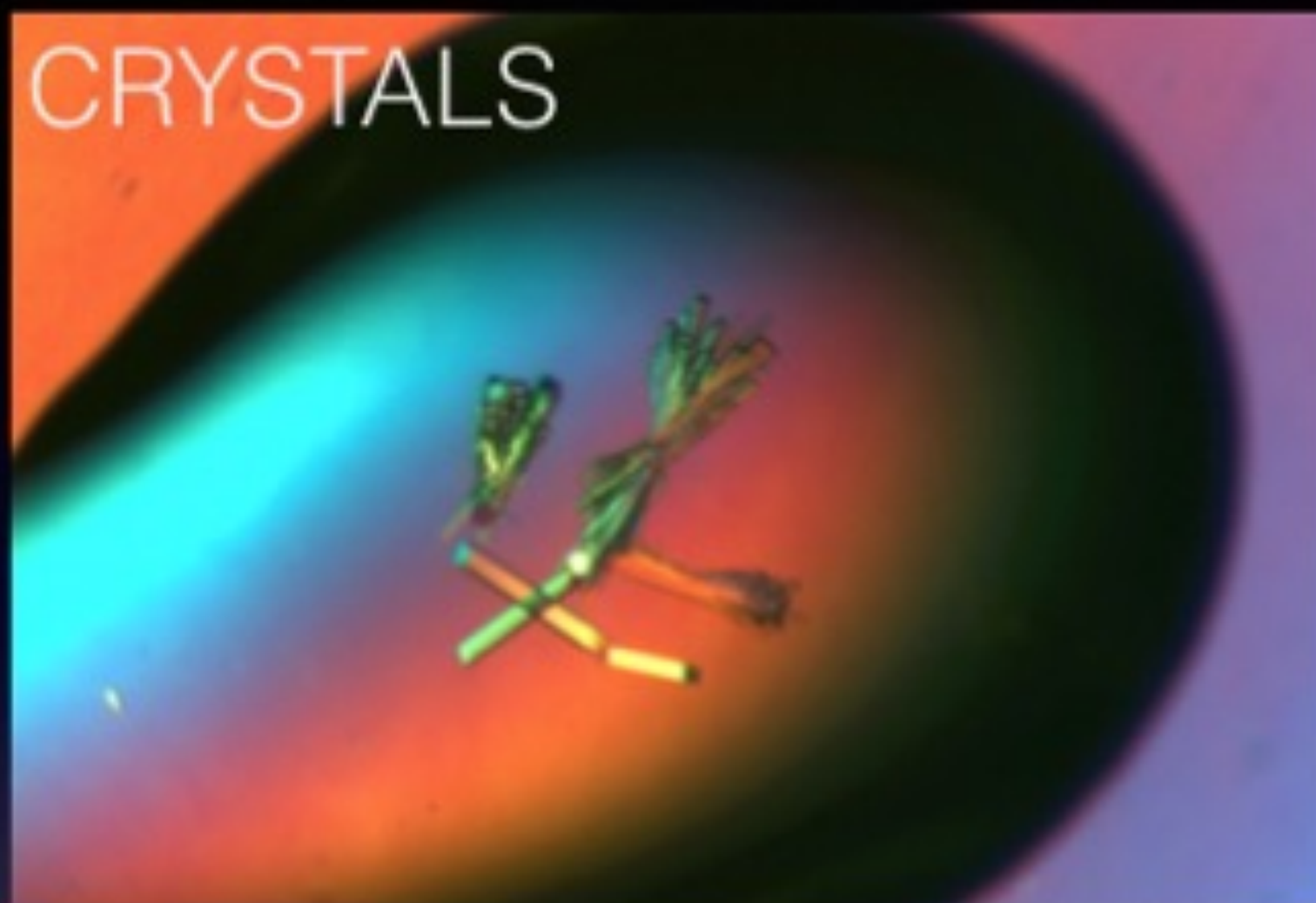


If you are not putting your important files on our servers (*such as BMBCore*), then it is possible that they are **NOT** getting backed up!

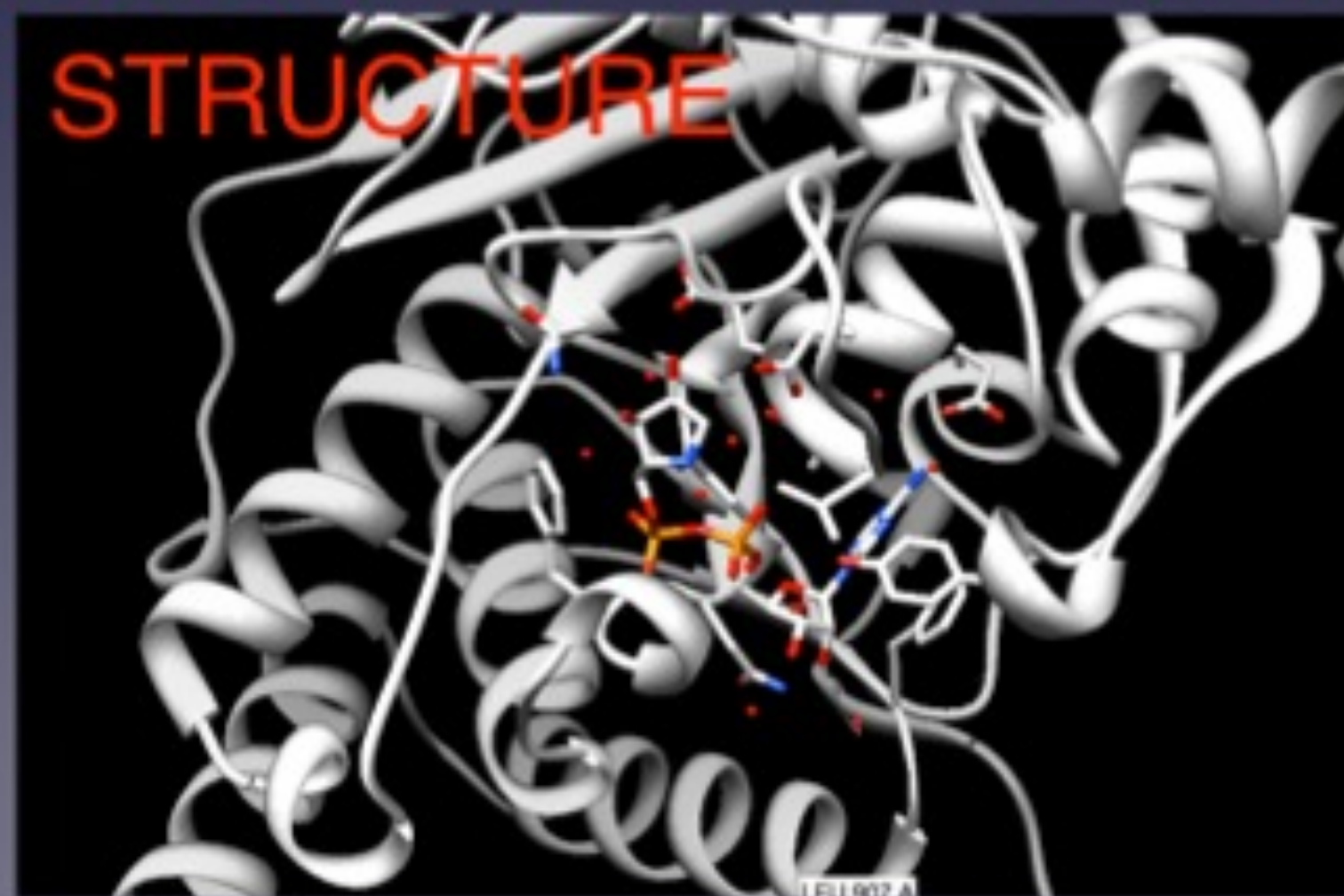
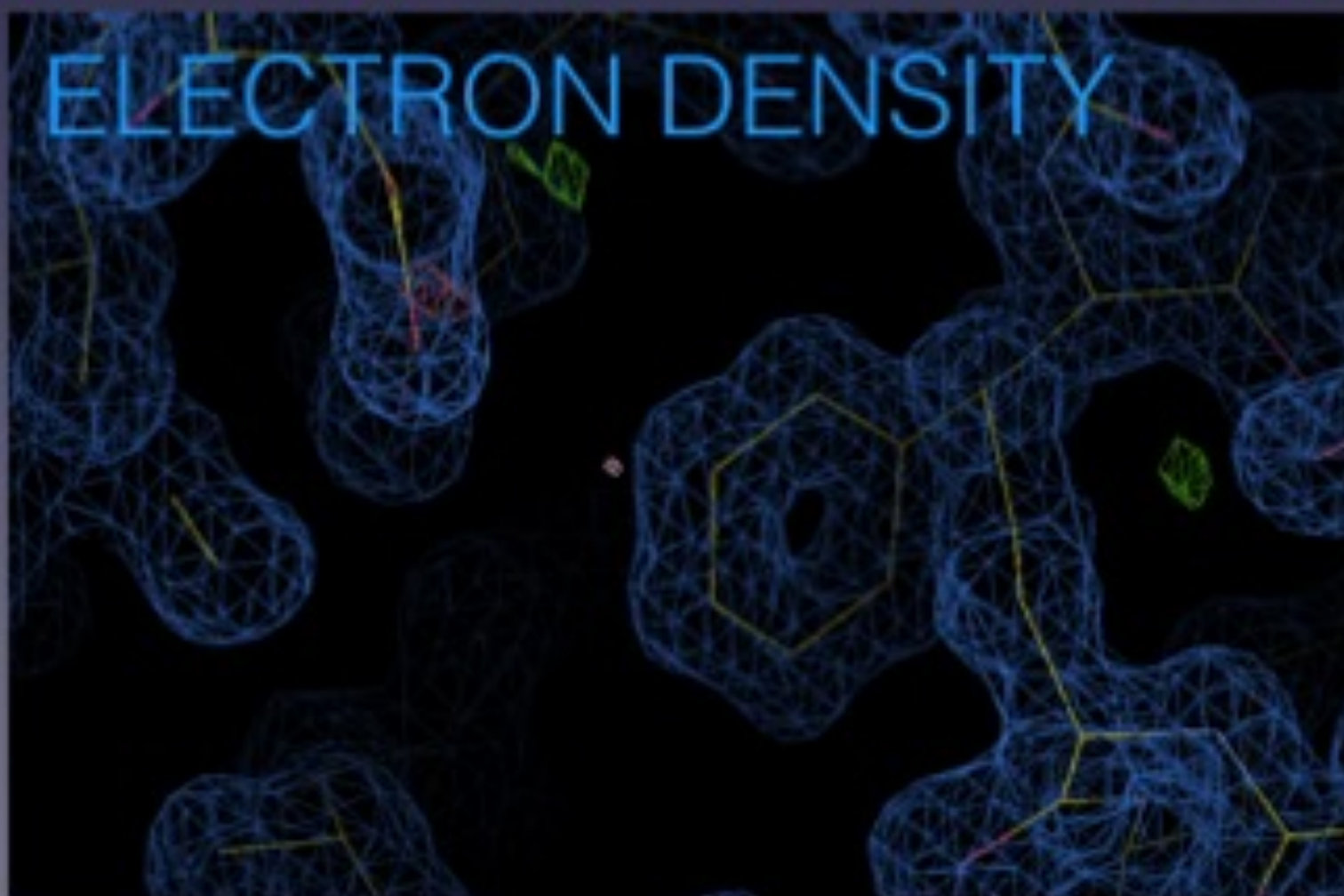
Make sure that your computer is running a backup program!

**Want to make sure your computer is backed up?
We provide several backup solutions.
Just send an email: support@biochem.wustl.edu**

WUSM Structural Biology Core



check it out sbc.wustl.edu check it out



Congratulations to Eric Galburt!



Eric Galburt, PhD, Assistant Professor, Department of Biochemistry and Molecular Biophysics, along with Christina Stallings, PhD, Assistant Professor, Department of Molecular Microbiology, received an equipment supplement grant award from the National Institute of General Medical Sciences for their MPI research entitled “Investigating Novel Mechanisms of Transcription Initiation Regulation in Mycobacteria”.

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 Washington
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Jim Janetka, Ph.D.

Washington University in Saint Louis



**“A fresh “out of the cell” look at bacteria and tumors:
Targeting pathogenic mechanisms in cancer and infection”**

Tuesday, September 6, 2016 - 10:30 am

Biochemistry Seminar Room, 264 McDonnell Sciences

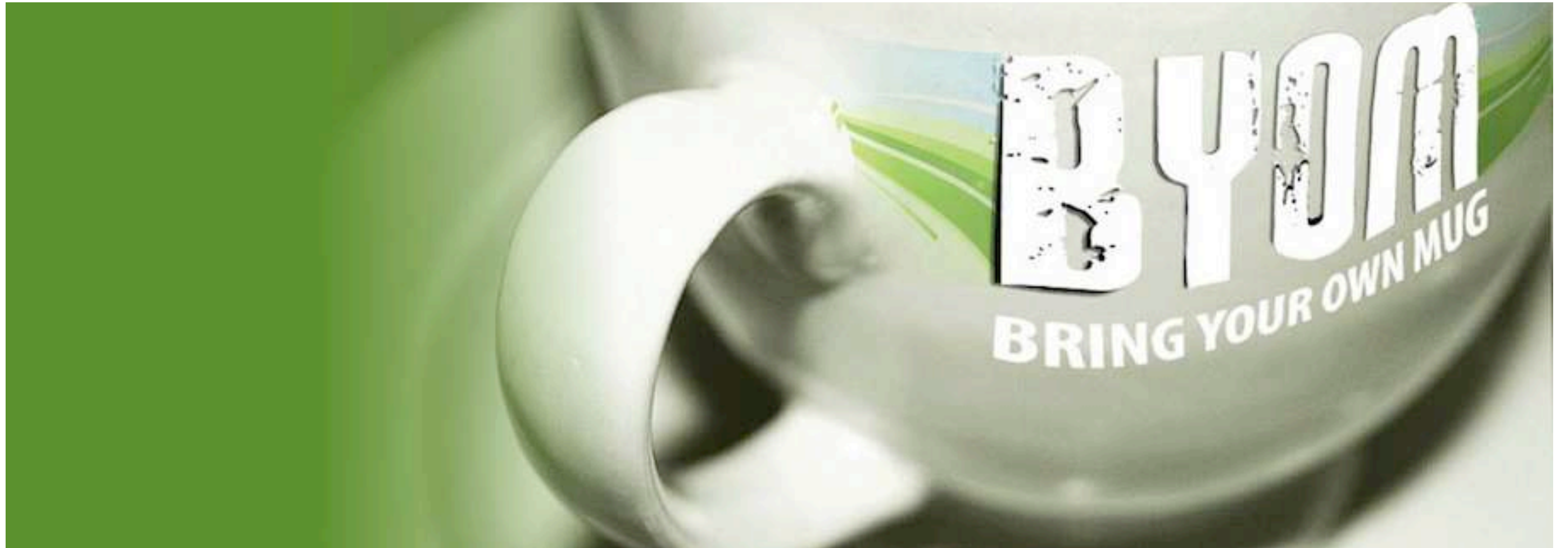
(Refreshments Provided)

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Friday Sep. 2
4:00 PM
Same Place

Please remember to...



July Publication



Smith, J. A., Xu, G., Feng, R., **Janetka, J. W.**,
Moeller, K. D.

C-Glycosides, Array-based Addressable Libraries,
and the Versatility of Constant Current
Electrochemistry.

ElectroAnalysis, 28:1-11, 2016.

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July Publication



Stojkovic, G., Makarova, A. V., Wanrooij, P. H., Forslund, J., **Burgers, P. M.**, and Wanrooij, S.

Oxidative DNA Damage Stalls the Human Mitochondrial Replisome.

Sci Rep (E-pub ahead of print.) (2016)

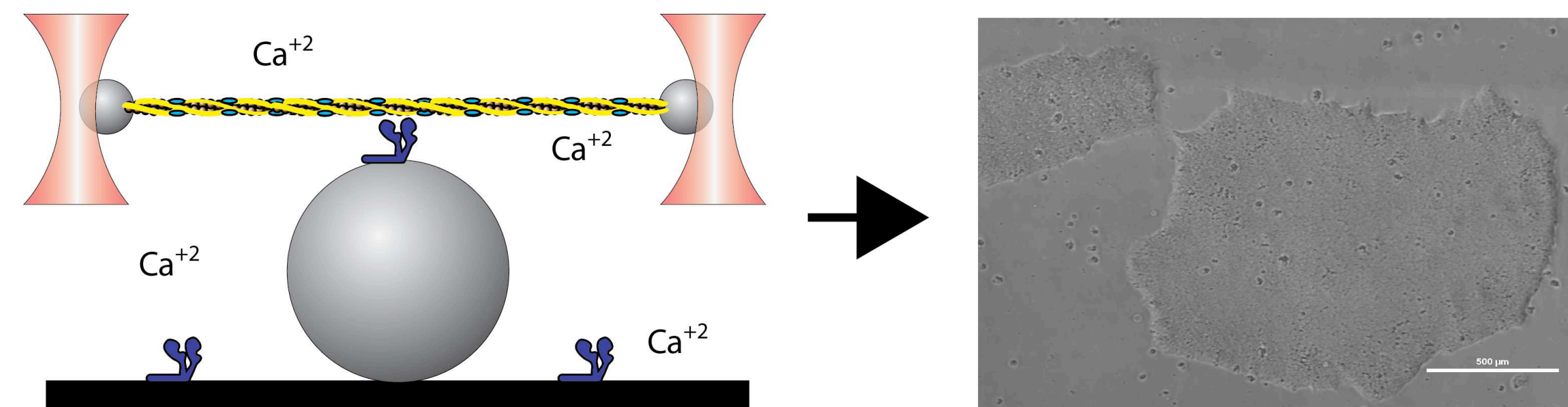
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Spotlight on Research

The **Greenberg Lab** focuses on the generation and transduction of forces by molecular motors, with an emphasis on human disease. The lab uses an array of biochemical, biophysical, and cell biological techniques to probe the function and regulation of these motors over a range of scales that extends from single molecules to tissues. Currently, the lab is studying the molecular basis of heart failure.”



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TEA TIME

for Faculty, Staff, Postdocs & Students

**Tuesdays & Thursdays
3:00-4:00 pm**

**Biochemistry Break Room
201 McDonnell Science**

Coffee, tea and cookies are served.

July Publication



Woody, M. S., Lewis, J.H., **Greenberg, M. J.**,
Goldman, Y. E., and Ostap, E. M.

MEMLET: An Easy-to-Use Tool for Data Fitting
and Model Comparison Using Maximum-
Likelihood Estimation.

Biophysical Journal, 111:273-282 (2016)

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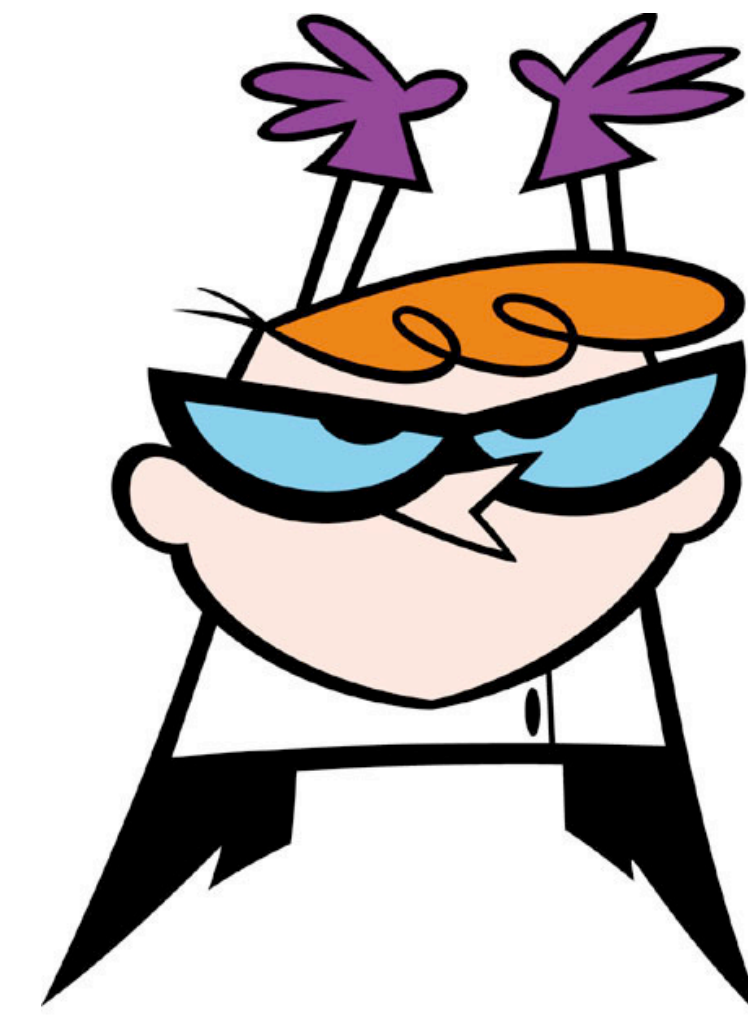
Don't Forget!



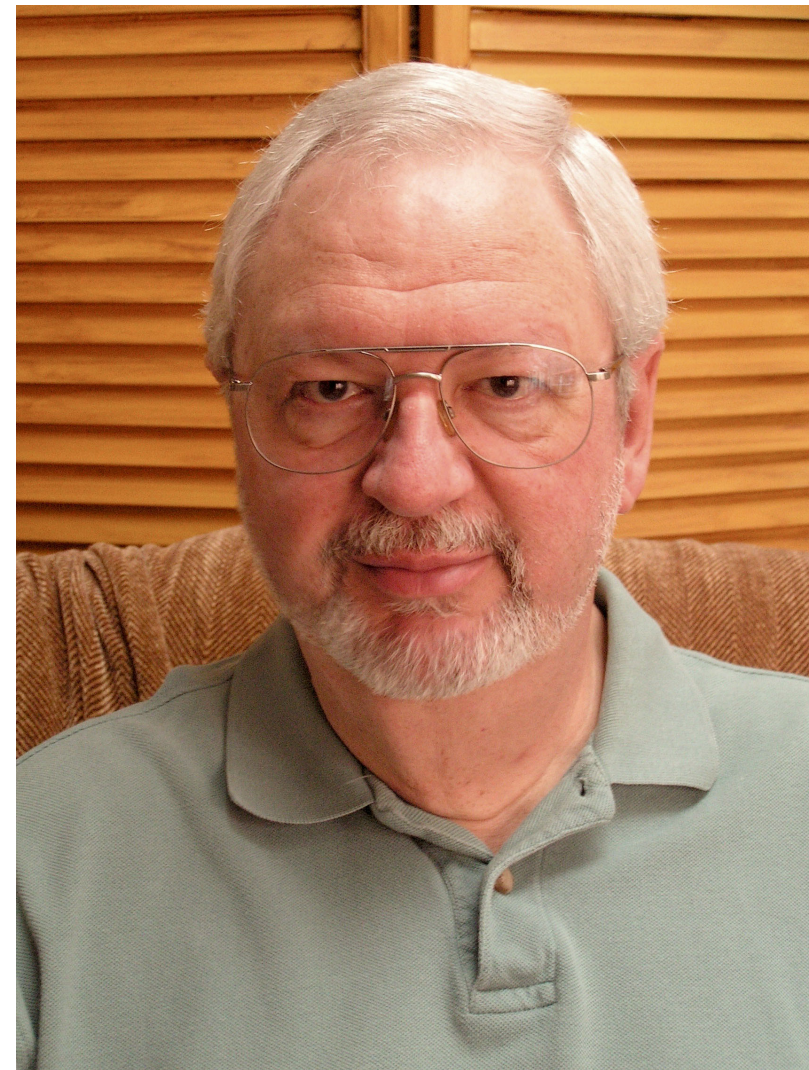
Please keep your lab locked if no one is in the lab when you leave.

And take your keys with you!

Please remember to take your gloves off when leaving the lab.



July Publication



Xiao, Z., Banan, B., Xu, M., Jia, J., Manning, P.T., Hiebsch, R. R., Gunasekaran, M., Upadhyaya, G. A., **Frazier, W. A.**, Muhanakumar, T., Lin, Y. and Chapman, W. C.

Attenuation of Ischemia-Reperfusion Injury and Improvement of Survival in Recipients of Steatotic Rat Livers Using CD47 Monoclonal Antibody.

Transplantation (E-pub ahead of print.) (2016)

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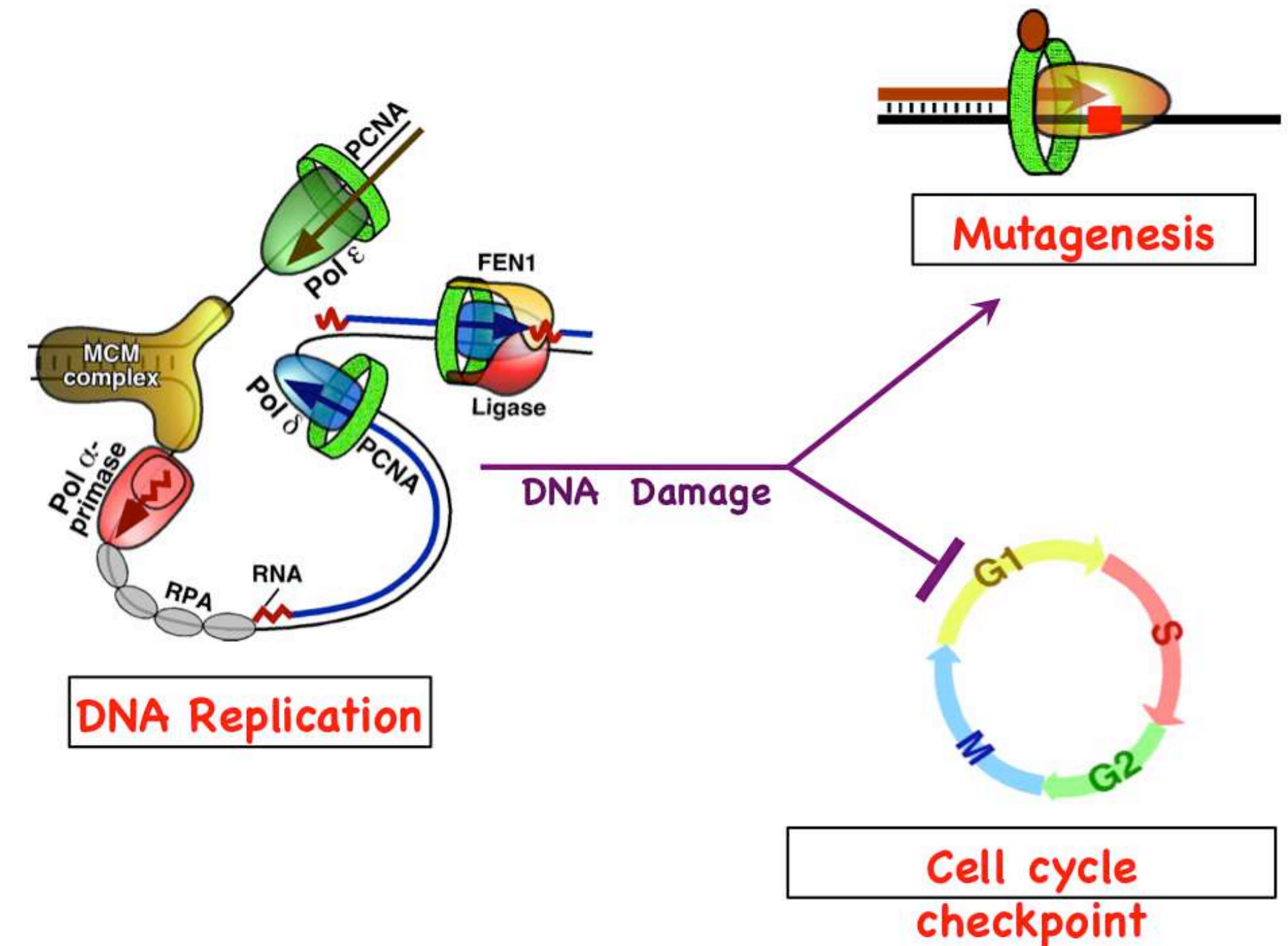


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Spotlight on Research

The **Burgers Lab** studies DNA replication and DNA damage response in eukaryotic cells. Using yeast as a model organism, the lab integrates the biochemical analysis of DNA-protein interactions in purified model systems with the genetic analysis of targeted yeast mutants. Specific areas of interest are lagging strand DNA replication and Okazaki fragment maturation, damage induced mutagenesis, and DNA damage cell cycle checkpoints.

Right: DNA replication fork and Okazaki fragment maturation



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BMB Support

Computer not working?

Not getting email on your smartphone?

We are here to help with the many computing issues that may pop up in your day-to-day operations.

Support email: **support@biochem.wustl.edu**

Support website: **BiochemSupport.wustl.edu**

Just send us an email or visit our website and click on ***Request Support*** to get help!



Congratulations to Tim Lohman!



Timothy M. Lohman, PhD, Professor, Department of Biochemistry and Molecular Biophysics, received an equipment supplement grant award from the National Institute of General Medical Sciences for his research entitled "*SSB Protein/DNA Interactions*".

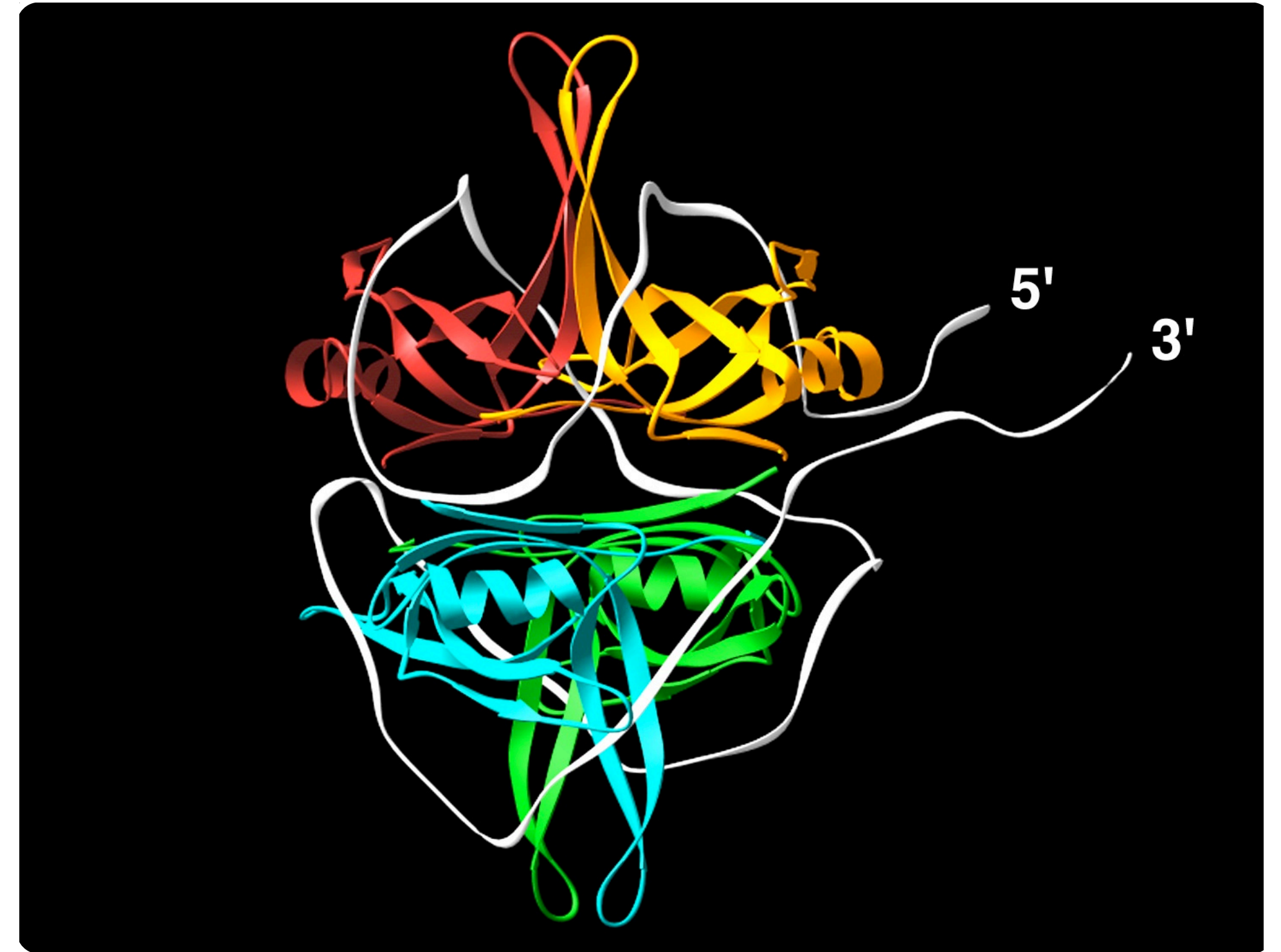
WUSM Holiday Schedule

Holiday	Day	Date Observed at WU
Labor Day	Monday	September 5, 2016
Thanksgiving Day	Thursday	November 24, 2016
Day after Thanksgiving	Friday	November 25, 2016
Christmas Day	Sunday	Monday, December 26, 2016
New Year's Day	Sunday	Monday, January 2, 2017

Spotlight on Research

Research in the **Lohman Lab** focuses on obtaining a molecular understanding of the mechanisms of protein-nucleic acid interactions involved in DNA metabolism, in particular, DNA motor proteins (helicases/translocases) and single stranded DNA binding proteins. Thermodynamic, kinetic, structural and single molecule approaches are used to probe these interactions at the molecular level.

Right: SSB



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Congratulations to Eric Galburt!



Eric Galburt, PhD, Assistant Professor, Department of Biochemistry and Molecular Biophysics, received a new four year grant award from the National Institute of General Medical Sciences for his research entitled "*Mechanisms of Eukaryotic Transcription Initiation*".

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Used paper drink cups can be recycled

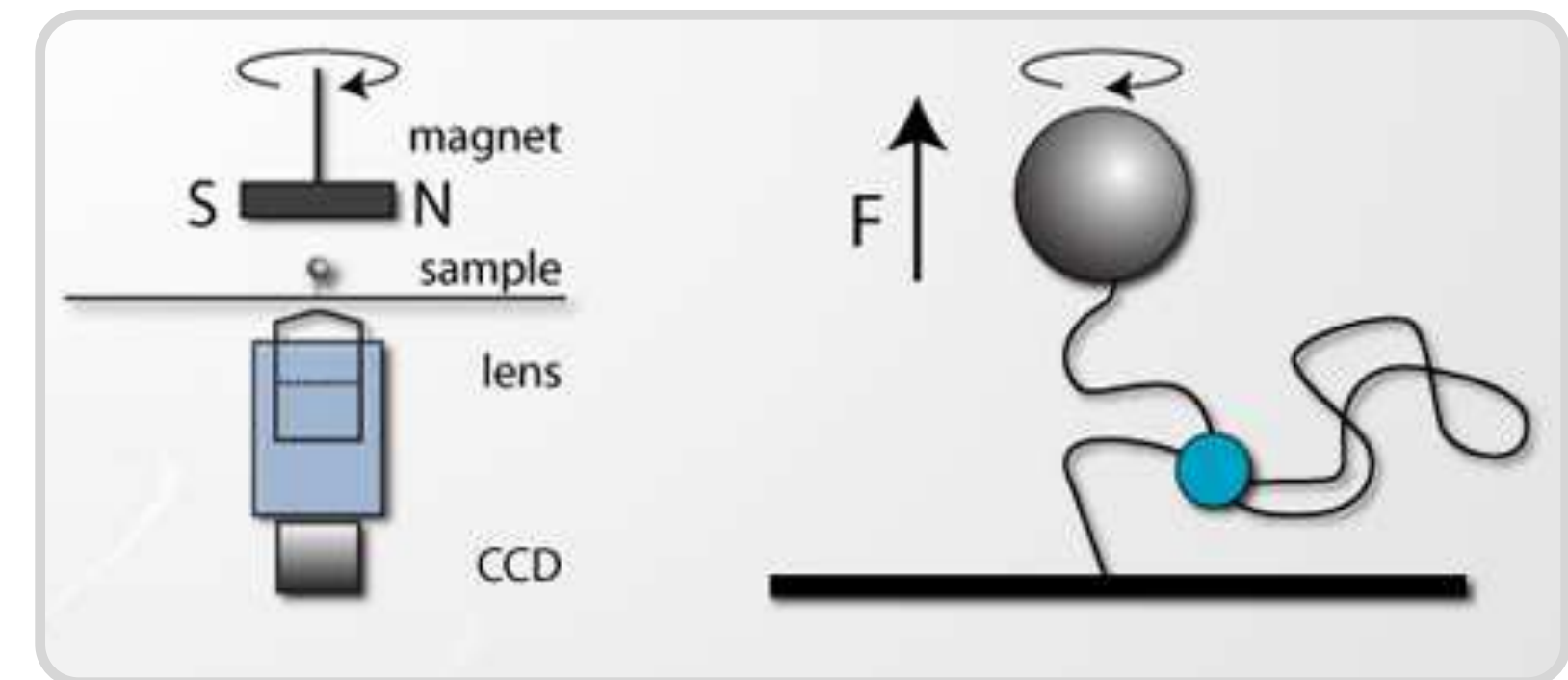


Used paper plates can be recycled



Spotlight on Research

The **Galburt Lab** studies the detailed molecular mechanisms of transcription initiation across the three domains of life. The lab specializes in using single-molecule and ensemble biophysical techniques including optical and magnetic trapping and fluorescence to monitor initiation in real-time. These techniques allow for the quantification of the rates and magnitudes of conformational transitions in RNA polymerase, its associated transcription initiation factors, and the promoter DNA template that ultimately underlie gene expression and its regulation.



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Are you paid **monthly?**

Please remember that your **time report
is **due by the 5th of each month.****

BMB SCIENCE FRIDAYS

a forum for new data, new ideas
and works in progress

**Science Fridays and Happy Hour:
EVERY FRIDAY, starting at 4PM.**

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