Welcome to the Department of Biochemistry and Molecular Biophysics

Washington University in St. Louis
School of Medicine
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 McDonnell Sciences Building

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
On October 7th the SLU/WU Retreat was held at the Danforth Plant Science Center.

To see all the photos, visit our site and look under News and Events.
Congratulations to Robb Welty for being selected for the 2016 Elson Fellowship in honor of Dr. Elliot Elson.

Robb is a graduate student in the Computational and Molecular Biophysics program. He is doing his PhD thesis work in the lab of Kathleen Hall. His project is examining the thermodynamics and kinetics of RNA tertiary folding.

The Elson Fellowship award provides funds for educational expenses.

The Elson Fellowship award was created in 2016 to support educational opportunities for outstanding students and post-doctoral trainees in the Department of Biochemistry and Molecular Biophysics. Training young scientists was a major focus of Dr. Elson’s career.
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/
**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](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
Congratulations to Jim Janetka!

Jim Janetka, PhD, Associate Professor, Department of Biochemistry and Molecular Biophysics, received a new two year grant award from the Alvin J. Siteman Cancer Research Fund for his research entitled “Inhibitors of growth factor activation as new adjunct chemotherapy for cancer”.

Department of Biochemistry and Molecular Biophysics

Washington University in St. Louis • School of Medicine
Please remember to...
Congratulations to Michael Greenberg!

**Dr. Michael Greenberg** has been chosen to receive the Undergraduate Research Mentor of the Year Award.

Dr. Greenberg will receive the award at the Fall Undergraduate Research Symposium on **Sat. Oct. 29th** at noon after a keynote address.

Read more at [biochem.wustl.edu/news](http://biochem.wustl.edu/news)

Anti-virulence C-mannoisdes as antibiotic-sparing, oral therapeutics for urinary tract infections.

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.”
Robb Welty and Dr. Kathleen Hall

*Nucleobases Undergo Dynamic Rearrangements during RNA Tertiary Folding.*

J Mol Biol (2016)
for Faculty, Staff, Postdocs & Students

Tuesdays & Thursdays
3:00-4:00 pm

Biochemistry Break Room
201 McDonnell Science

Coffee, tea and cookies are served.
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.
A Prescription for Change:

The Looming Crisis in Drug Development

Is now available from Amazon, Barnes & Noble, and other book sellers.
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
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”.

Department of Biochemistry and Molecular Biophysics
Washington University in St. Louis • School of Medicine
October Publication

Kathryn M. Hart, Chris M. W. Ho, Supratik Dutta, Michael L. Gross & Gregory R. Bowman

*Modelling proteins’ hidden conformations to predict antibiotic resistance*

Nature Communications 7, Article number: 12965 (2016)
<table>
<thead>
<tr>
<th>Holiday</th>
<th>Day</th>
<th>Date Observed at WU</th>
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<tbody>
<tr>
<td></td>
<td></td>
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<tr>
<td>Labor Day</td>
<td>Monday</td>
<td>September 5, 2016</td>
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<tr>
<td>Thanksgiving Day</td>
<td>Thursday</td>
<td>November 24, 2016</td>
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<tr>
<td>Day after Thanksgiving</td>
<td>Friday</td>
<td>November 25, 2016</td>
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<tr>
<td>Christmas Day</td>
<td>Sunday</td>
<td>Monday, December 26, 2016</td>
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<tr>
<td>New Year’s Day</td>
<td>Sunday</td>
<td>Monday, January 2, 2017</td>
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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
Used paper drink cups can be recycled

Used paper plates can be recycled
Congratulations to Greg Bowman!

Greg Bowman has been chosen to receive a 2016 Packard Fellowship for Science and Engineering in support of his research entitled “Energy-landscape engineering: exploiting proteins uncharted conformations”.

Read more at biochem.wustl.edu/news
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.
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.