

Welcome to the Department of Biochemistry and Molecular Biophysics

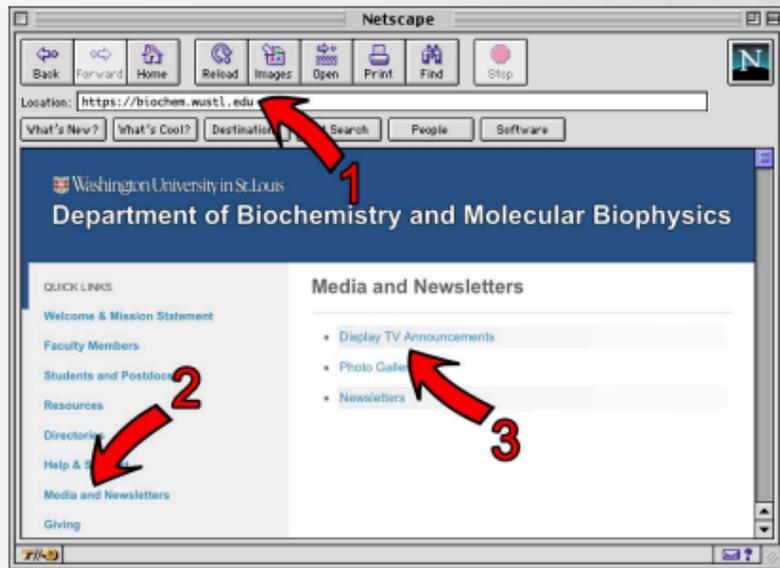


Washington University in St. Louis
School of Medicine

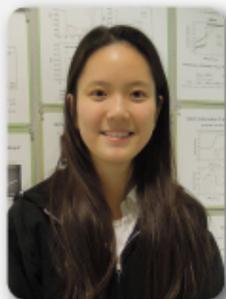
<https://biochem.wustl.edu>

View these slides online!

- 1) Go to biochem.wustl.edu
- 2) Click **Media and Newsletters**
- 3) Click **Display TV Announcements**



October Publication



Weisz D.A., Johnson V.M., Niedzwiedzki D.M., **Shinn M.K.**, Liu H., Klitzke C.F., Gross M.L., Blankenship R.E., **Lohman T.M.**, & Pakrasi H.B.

A novel chlorophyll protein complex in the repair cycle of photosystem II.

Proc Natl Acad Sci USA. pii: 201909644. doi: 10.1073/pnas.1909644116. (2019)

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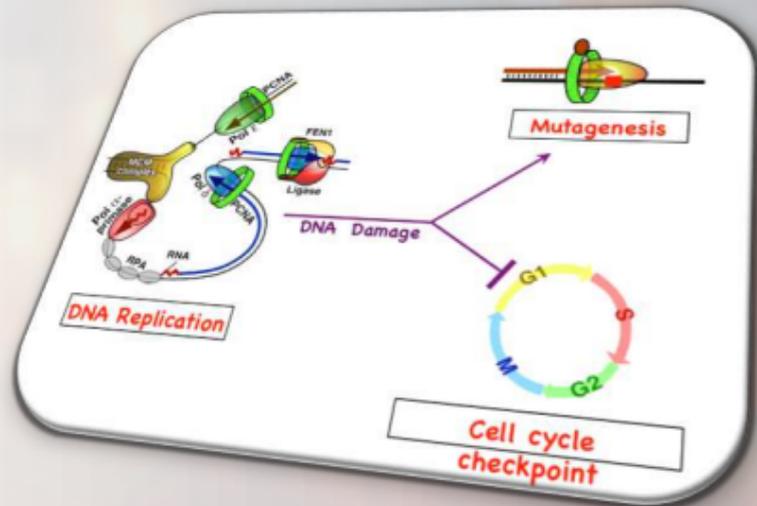
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Spotlight on Research

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



See more research:
biochem.wustl.edu/spotlight

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Influenza (“the flu”) can be a very serious disease. Even healthy adults can get sick and miss work. If you get the flu, you can spread it to family, friends or co-workers.

DON'T GET THE FLU. DON'T SPREAD THE FLU.
GET VACCINATED!

Why didn't I get my flu vaccine?



2019 WUSM Employee Seasonal Flu Vaccinations

4444 Forest Park, Room 1540 and 1540E
October 9: 8:00 am - 12:00 pm

**Barnes-Jewish West County Hospital, MOB 3,
2nd Floor, HCI Kitchen**
October 17: 8:00 am - 12:00 pm
October 22: 8:00 am - 12:00 pm

Center for Advanced Medicine, 3rd Floor
October 3: 7:00 am - 2:30 pm (Conf. Room 1)
October 21: 7:00 am - 2:30 pm (Conf. Room 2)

**Center for Advanced Medicine South County,
Suite 2300 Conf. Room**
October 16: 12:30 pm - 4:00 pm

**Children's Specialty Care Center (CSCC),
1st Floor Conf. Room**
October 16: 7:00 am - 11:00 am

Christian Hospital, MOB2, Suite 213
October 2: 1:00 pm - 5:00 pm

Farrell Learning & Teaching Center, Lobby
October 1: 7:00 am - 2:30 pm
October 15: 7:00 am - 2:30 pm
October 23: 7:00 am - 2:30 pm

**McDonnell Pediatric Research Building,
Lobby**
October 28: 9:00 am - 2:00 pm

Northwest Tower, 10th Floor, Conf. Room 10A
October 8: 7:00 am - 12:00 pm
October 30: 7:00 am - 2:30 pm

**Siteman Cancer Center-St. Peters,
Conf. Room 304**
October 2: 7:00 am - 11:00 am

Elliot Elson Fellowship Seminar



On September 20th, 2019, the department held a special seminar to recognize the recipient of the 2018 Elliot Elson Fellowship.

Ms. Sarah Clippinger shared her research on "Assembly and Binding of E. coli RecOR Proteins to SSB C-terminal tails".

Visit biochem.wustl.edu/events to read more and see photos from the event!

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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: BMBSupport.wustl.edu

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

WashU Electronic Lab Notebook

The Research Infrastructure Services (RIS) group has begun piloting **WashU ELN**, an electronic lab notebook service powered by LabArchives.

The LabArchives Electronic Lab Notebook is a cloud-based application that facilitates the creation, storage, sharing and management of research data.

RIS invites the research community to participate in upcoming LabArchives training sessions.

Visit biochem.wustl.edu/news to read more!



labarchives
Research Notebook

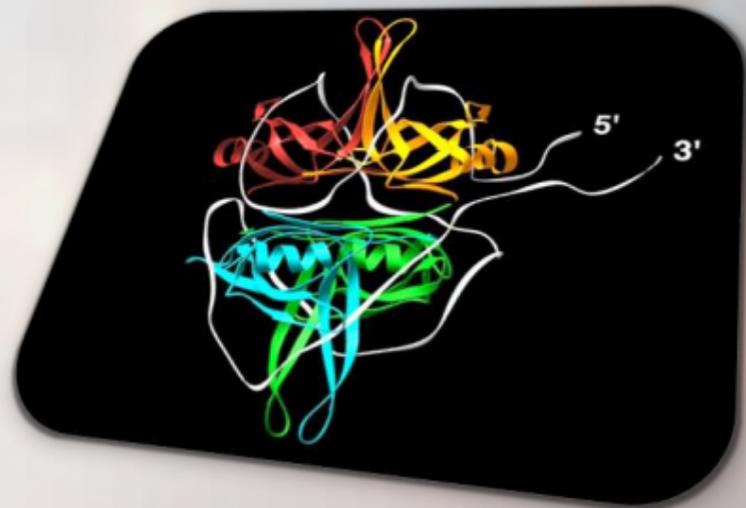
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Spotlight on Research

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.



See more research:
biochem.wustl.edu/spotlight

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TEA TIME

for Faculty, Staff, Postdocs & Students

Tuesdays & Thursdays
3:00-4:00 pm

Biochemistry Break Room
201 McDonnell Sciences Building

Coffee, tea and cookies are served.



Congratulations to Dr. Janetka

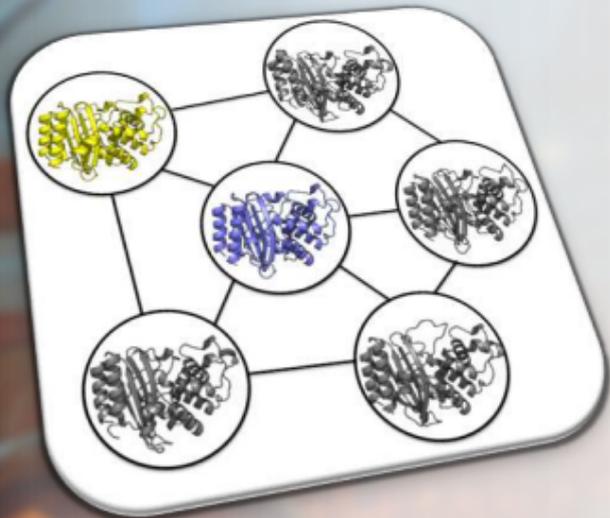


September 16th, 2019 – **Jim Janetka, PhD**, Associate Professor of Biochemistry and Molecular Biophysics, and Co-Founder of ProteXase Therapeutics, Inc., along with Lidija Klampfer, PhD, Co-Founder and Chief Scientific Officer of ProteXase Therapeutics, Inc., received a one-year SBIR grant award from the National Cancer Institute for their research entitled ***"Inhibitors of pro-HGF activation overcome resistance to anti-EGFR therapy"***.

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Spotlight on Research



The **Bowman Lab** seeks to understand the distribution of different structures a protein adopts and how this ensemble determines a protein's function. Examples of ongoing research projects include 1) understanding how mutations in the enzyme beta-lactamase change its specificity without changing the protein's crystal structure, 2) designing allosteric drugs, and 3) developing algorithms for quickly building models of the different structures a protein adopts.

See more research:

biochem.wustl.edu/spotlight

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Your **BMB ID** is used for network files shares, remote VPN access, and BMB WiFi.

You can now change your BMB ID password, reset it if you have forgotten it, or even recover your BMB ID if you don't remember what it is!

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Don't Forget!



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

Don't forget your keys!

Please remember to take **OFF** your gloves when leaving the lab.



Back Up Your Stuff!

Are your files backed up?

If you are not keeping your files on a network file server, running a local backup client, or utilizing cloud storage, then it is possible that your files are **not** backed up!

**Want to make sure your data is backed up?
We provide several backup solutions.**

BMBSupport.wustl.edu/backups



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BMB SCIENCE FRIDAYS

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

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

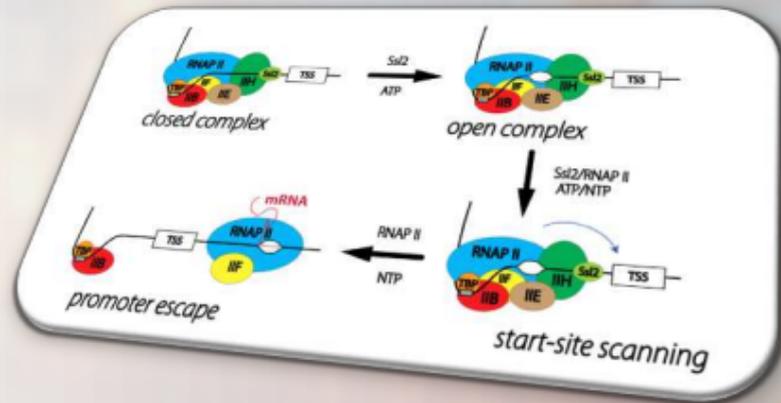
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Spotlight on Research

The **Galburt Lab** strives to understand the physical mechanisms of transcription initiation and other important DNA-protein interactions. More specifically, we use a variety of single-molecule and ensemble biophysical techniques including both optical and magnetic tweezers and fluorescent microscopy to investigate how the assembly of initiation complexes on gene promoters leads to DNA unwinding and transcription. Our work is currently focused on the mechanisms of basal transcription initiation in Eukaryotes and on factor-regulated transcription in *Mycobacterium tuberculosis*.



See more research:
biochem.wustl.edu/spotlight

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Holiday Schedule

Holiday	Day	Date Observed at WU
Independence Day	Thursday	July 4 th , 2019
Labor Day	Monday	September 2 nd , 2019
Thanksgiving Day	Thursday	November 28th, 2019
Friday after Thanksgiving	Friday	November 29th, 2019
Christmas Eve	Tuesday	December 24 th , 2019
Christmas Day	Wednesday	December 25 th , 2019

The Writing Center



Do you need assistance with your writing process?

Are you working on a manuscript for publication, grant, personal statement, or other writing piece?

The Writing Center staff are available to help you out! This is a free service provided to all students, faculty, staff, and postdocs.

Visit writingcenter.wustl.edu for more information!

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Farmer's Market

**Inside the McDonnell Pediatric
Research Building
or
Outside on the Plaza
(weather permitting)**

**Every Thursday!
10:00 am - 2:00 pm**

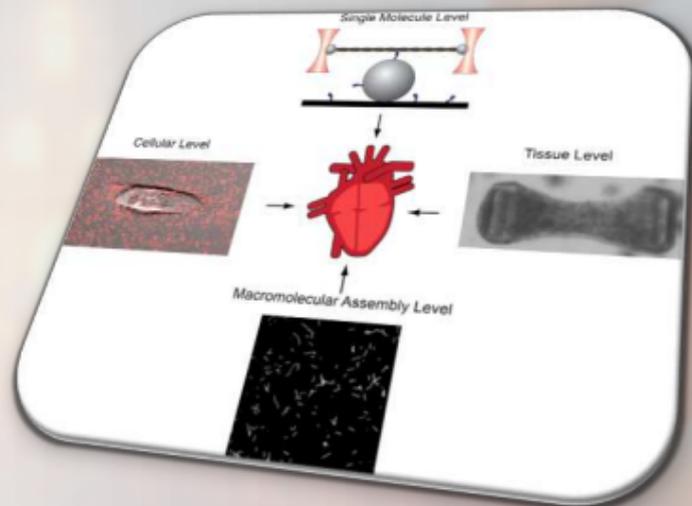


Are you paid **monthly?**

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

Spotlight on Research

The **Greenberg Lab** focuses on how cytoskeletal motors function in both health and disease. Currently, the lab is studying mutations that cause familial cardiomyopathies, the leading cause of sudden cardiac death in people under 30 years old. The lab uses an array of biochemical, biophysical, and cell biological techniques to decipher how these mutations affect heart contraction from the level of single molecules to the level of engineered tissues. Insights into the disease pathogenesis will guide efforts to develop novel therapies.



See more research:
biochem.wustl.edu/spotlight

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WashU Research Storage



Running low on storage?

WashU IT **Research Storage** is available to all **Faculty** members (totally separate from BMB Network storage).

The first **5TB** of storage are provided at *no-cost* to you!



Visit for more information:
BMBSupport.wustl.edu

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Congratulations to Dr. Elson



Dr. Elliot Elson will be awarded the 2020 Ignacio Tinoco Award from the Biophysics Society.

The award will be presented to Dr. Elson at the Annual Meeting of the Biophysical Society in San Diego, California on February 15-19, 2020.

More information about the award can be found on the web site of our department and the Biophysical Society.

HAVING ISSUES AT WORK? WE'RE HERE TO HELP.

Contact any of the following for help

Jayma Mikes, Business Manager, jmikes@wustl.edu, 314-362-0262

John Cooper, Department Head, jcooper11@gmail.com, 314-362-3964

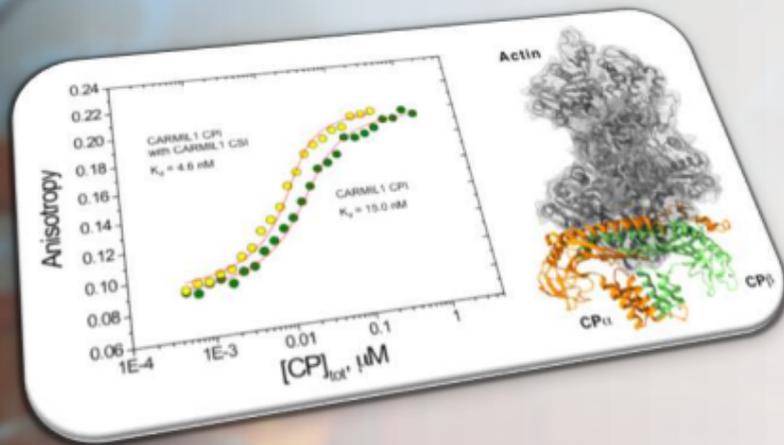
Jessica Kennedy – Title IX Director, jwkennedy@wustl.edu, 314-935-3118

Jessica Kuchta-Miller – Staff/Postdoc/Graduate Student Ombuds, 314-379-8110

Karen O'Malley – Medical Student Ombuds, 314-660-2089

Jim Fehr – Faculty Ombuds, 314-660-2089

Spotlight on Research



The **Cooper Lab** is interested in how the actin filaments in cells assemble and how that assembly controls cell shape and movement. One focus is an actin-binding protein called "capping protein," which caps one end of the actin filament. Capping protein is in turn regulated by intrinsically disordered regions of the CARMIL family of proteins, which exhibit positive linkage in their binding interactions.

See more research:
biochem.wustl.edu/spotlight

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