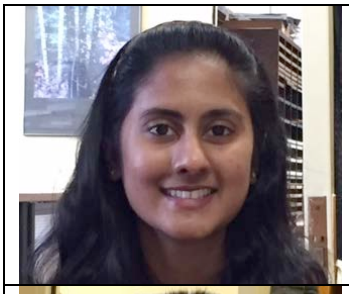
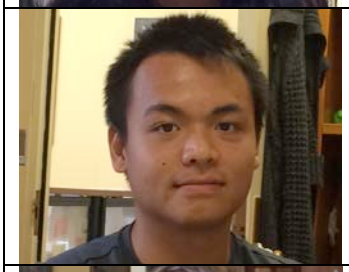
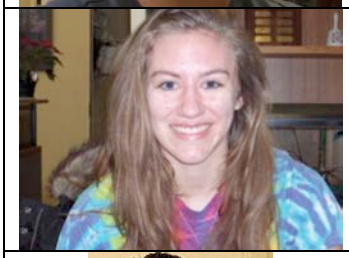
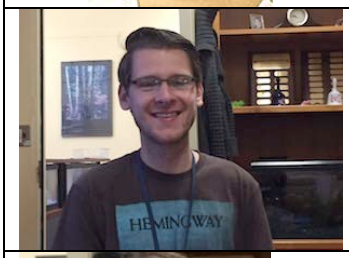
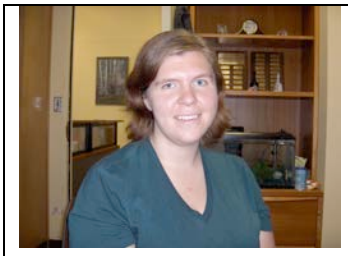
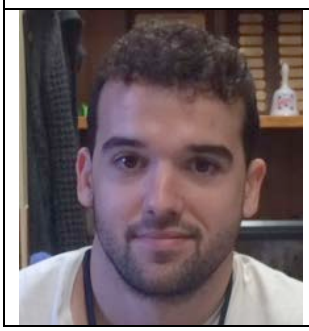
What's New in Biochemistry

PERSONNEL CHANGES:

	Anna John joined Stewart Loh's lab as a Graduate Assistant.
	Nick Huang joined Andras Perl lab as a Graduate Assistant. Nick is an MD/PhD student.
	Theresa Parascandola has graduated from SU and has decided to move on from her research lab worker position in Michael Cosgrove's lab.
	Norisha McCaddy has joined Michael Cosgrove's lab as a Student Assistant.
	Lee Bauter completed the SURF program in Wenyi's lab and returned to his undergraduate studies at LeMoyne.
	Christopher Demas has joined Stewart Loh's group as a Student Assistant.

	Renee Bullard completed her Masters degree in Dimitra Bourboulia's lab (adjunct Urology faculty) and has accepted a Biology lecturer position at SUNY Cortland.
	Javier Sanchez Pozo joines Dimitra Bourboulia's lab as a Graduate Assistant.

GRANT INFO:

Stewart Loh was awarded a $75k NIH grant to replace a stop-flow fluorescence instrument that he bought from his start up when we first came to upstate. It was the first and most expensive piece of equipment he has ever bought. His lab published many papers at Upstate using data from that old instrument including their very first one in Nature Structural Biology.

PUBLICATIONS:

Super elongation complex contains a TFIIF-related subcomplex.

Knutson BA[1], Smith ML[1], Walker-Kopp N[1], Xu X[1]. Transcription. 2016 May 25:e1194027. [Epub ahead of print]
http://www.ncbi.nlm.nih.gov/pubmed/27223670

In-vitro, SDH5-dependent flavinylation of immobilized human respiratory complex II flavoprotein.

Zafreen L[1], Walker-Kopp N[1], Huang LS[1], Berry E[2]. Arch Biochem Biophys. 2016 Jun 11;604:47-56. doi: 10.1016/j.abb.2016.06.006. [Epub ahead of print]
http://www.ncbi.nlm.nih.gov/pubmed/27296776?dopt=Abstract

Crystal structure of yeast V1-ATPase in the autoinhibited state.

Oot RA[1], Kane PM[1], Berry EA[1], Wilkens S[2]. EMBO J. 2016 Jun 13. pii: e201593447. [Epub ahead of print]
http://emboj.embopress.org/content/early/2016/06/13/embj.201593447.long

Mitochondrial dysfunction in the liver and antiphospholipid antibody production precede disease onset and respond to rapamycin in lupus-prone mice.

Oaks Z[1,2], Winans T[1,2], Caza T[1,3], Fernandez D[1,3], Liu Y[1], Landas SK[4], Banki K[4], Perl A[1,2,3]. Arthritis Rheumatol. 2016 Jun 22. doi: 10.1002/art.39791. [Epub ahead of print]
http://www.ncbi.nlm.nih.gov/pubmed/27332042?dopt=Abstract

The FNIP co-chaperones decelerate the Hsp90 chaperone cycle and enhance drug binding.

Woodford MR[1,2], Dunn DM[1,2,3], Blanden AR[2,3], Capriotti D[1,2], Loiselle D[4], Prodromou C[5], Panaretou B[6], Hughes PF[4], Smith A[4], Ackerman W[7], Haystead TA[4], Loh SN[2,3], Bourboulia D[1,2,3], Schmidt LS[8,9], Marston Linehan W[9], Bratslavsky G[1,2], Mollapour M[1,2,3].
Nat Commun. 2016 Jun 29;7:12037. doi: 10.1038/ncomms12037.
http://www.ncbi.nlm.nih.gov/pubmed/27353360?dopt=Abstract

Incision of damaged DNA in the presence of an impaired Smc5/6 complex imperils genome stability

Jie Peng and Wenyi Feng
Nucleic Acids Research, (2016) doi: 10.1093/nar/gkw720
nar.oxfordjournals.org/content/early/2016/08/17/nar.gkw720.full?keytype=ref&ijkey=heU3Nk1OQcAzUEB

AWARDS, RECOGNITIONS, AND OTHER ACTIVITIES:

Zackary Oaks successfully defended the PhD part of this MD/PhD degree on May 10th. Dr. Andras Perl was his advisor. Zack returned to medical school here at Upstate to continue with the MD part of this degree.


Zach Oaks (right) with his advisor, Andras Perl (left).

Congratulations to Michael Jaskolka who passed his Qualifying Exam on August 16th.


Michael's advisor, Patty Kane, gifted him with this princess scepter in celebration of his accomplishment.

Congratulations to Renee Bullard who successfully defended her Master's thesis with Honors!!

Renee Bullard (left) with her advisor, Dimitra Bourboulia (right)

Congratulations to Marissa Smith who passed her Qualifying Exam with Honors on August 24th on the same day that her advisor's, Bruce Knutson's, son was born. A double celebration!

The Biochemistry softball team reclaimed the softball trophy at the annual GSA picnic on June 24th! They beat Cell & Developmental Biology in the first game (20-0) and Microbiology & Immunology in the second game (16-2).

Back Row from left to right: Mark Schmitt (pulling up his shorts), Kevin Namitz, Liam Coyne, Tom Duncan, Josh Karchin, Ryan Palumbo, Chris Duncan. Center Row from left to right: Stewart Loh, Andrew McCulley, Nilda Alicea Velazquez, Steve Hanes, Katherine Frega, Tom Benz (baseball guy), Front row from left to right: Cassandra Barnes and Michael Jaskolka

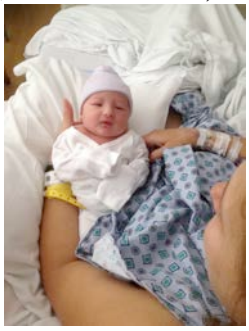
PERSONAL NEWS:

Sue Viggiano is a grandmother again! Her daughter, Diana, delivered a little girl, Mina Jo, on July 6th, at 1:22 am. Mother and baby are doing well.

Our annual Biochemistry picnic was on Monday, July 25th at Jamesville Beach. Even with the rain, it was a good time. Thank you to Andrew McCulley and Sandra Jarvis for their efforts in organizing the event. Can Jam, hacky sack, bocce, and soccer were enjoyed by many.

Soccer game participants: from left to right Andrew McCulley, Coach Tom Ducna, Xin Jie Chen, Michael Huang, Stuti Sharma, Ebbing deJong, and Michael Jaskolka.

Bruce Knutson is a Dad! Aksel Kenneth Bruce Knutson (two middle names after both of his grandpas) was born Wednesday, August 24, 2016, 12:59 am (7 lbs., 5 oz./21 inches).



NEWS ABOUT ALUMNI:

From Stephen Shinsky: "*After only 10 months in Dr. Brian D.Strahl's lab at UNC-Chapel Hill (Dept. of Biochemistry & Biophysics and Lineberger Comprehensive Cancer Center), I am moving on. I will be joining the lab of Dr. David W. Christianson in the Department of Chemistry at the University of Pennsylvania starting just after Labor Day.*

Although I've only been at UNC a short time, this has been my most productive year inscience! I was awarded two competitive postdoctoral fellowships.

1. Ruth L. Kirschstein National Research Service Award (NSRA) Individual Postdoctoral Fellowship 1F32CA210919-01 (June, 2016)
National Cancer Institute (NCI) of the National Institutes of Health (NIH)

2. Pagono Postdoctoral Fellowship Award in Integrative Training in Cancer Model Systems (ITCMS) (January, 2016)
Lineberger Comprehensive Cancer Center of the University of North Carolina at Chapel Hill

I alsopublished two co-first authoredpapers (1-2) and one co-authoredpaper (3). I hope I can keep up this stamina!

1. Hacker,K.E., Fahey, C.C.*, Shinsky, S.A.*, Chiang, Y-C.J.*, DiFiore, J.V.*, Jha, D.K., Vo, A.H., Shavit, J.A., Davis, I.J., Strahl, B.D.,Rathmell, W.K. 2016. Structure/Function Analysis of Recurrent Mutations in SETD2 Reveals a Critical and Conserved Role for a SET Domain Residue in Maintaining Protein Stability and H3K36 Trimethylation. Journal of Biological Chemistry (in press, accepted)*
**Equal Contribution*

2. Andrews, F.H., Shinsky S.A.*, Shanle, E.K., Bridgers, J.B., Gest, A., Tsun, I.K.,Krajewski, K., Shi, X., Strahl, B.D., Kutateladze, T.G. 2016. The Taf14 YEATS domain is a reader of histone crotonylation. Nature Chemical Biology 12: 396-398*
**Equal Contribution*

3. Gatchalian, J., Mora, C.*, Shinsky, S.A., Ospina,R.R., Liendo, A.M., Klein, B.J., Andrews, F.H., Krajewski, K., Strahl, B.D.,van Wely, K.H.M., Kutateladze, T.G. 2016. Chromatin condensation andrecruitment of PHD finger proteins to histone H3K4me3 are mutually exclusive. Nucleic Acids Research 44(13): 6101-6112*

I should also mention that Dr. Strahl co-founded a startup biotechnology company (EpicypherInc.) about 4 years ago and beginning this past March (2016), Epicypher brought me on as an independent research scientist (contractor) and consultant. They have asked me to stay on as a consultant after my transfer to University of Pennsylvania. It has been interesting and fun to gain some "industry" experience."