

POSTDOCTORAL SCHOLARS & FELLOWS CONNECT

Newsletter Issue 10 | August 2018

GERMINAL CENTER IN MOUSE SPLEEN

Immunofluorescent image of germinal center (GC) formed in mouse spleen upon protein immunization. GC (GL7+-green) is organized into dark zone (contains rapidly proliferating Ki67+ GC B cells-red) and light zone (contains follicular dendritic cells-blue).

GCs are important sites of antibody affinity maturation.

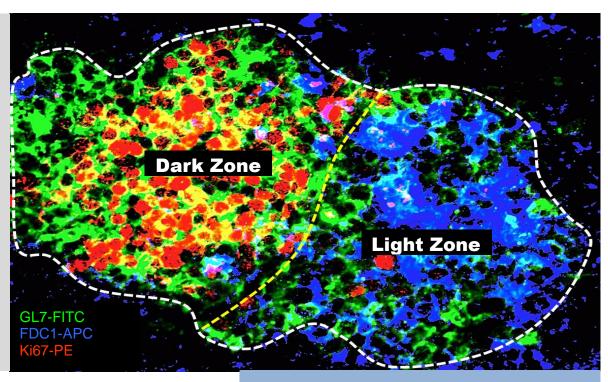
Image Courtesy:

Dr. Sathi Babu Chodisetti

Postdoctoral Scholar

Dr. Ziaur Rehman

Department of Microbiology and Immunology



THIS ISSUE'S FOCUS: CELEBRATING OUR OWN

The monthly newsletter for and by postdoctoral scholars and fellows at the Penn State College of Medicine.

In September we recognize the significant contributions that postdoctoral scholars make to U.S. research and discovery.

We encourage you to engage with your colleagues during the academic and networking events during the week of September 16th, and join us in celebrating the achievements of our outstanding postdocs.

IN THIS ISSUE:

- 1. This Month's Focus
 - & Submitted Cover Image
- 2. Career Development Events
 - & Meet the Postdoc Council
- Postdoc Picnic
 - & Postdoc Week 2018
- 4. Review of PLaN

April & June 2018

- 5. Techniques: Image Stream
- Postdoc Research Achievements
- Data and Dine 2018 Review
- 8. Around Town Events

& Letter from the Office of Postdoctoral Affairs

CAREER DEVELOPMENT EVENTS

AUGUST

Work Life Balance - Facts and Myths

August 21 @ 3:00 pm - 4:30 pm

Location: C3621 - Penn State College of Medicine

Open to all postdocs, a discussion how to balance your professional

and personal lives.

Resumes Vs. CVs

August 27 @ 12:00 noon - 1:00 pm, C3700

5:00 pm - 6:00 pm, ASB 2008

Do you know the difference between a resume and CV? Learn when to use each document, how to incorporate skills and experiences desired by employers, and why proper formatting is so important. *Bring your resume and/or CV along with an applicable job/internship posting.*

SEPTEMBER

How to 'Work' a Career Fair

September 7 @ 12:00 noon - 1:00 pm

Room C5702- Penn State College of Medicine

Learn what to do before, during, and after a career fair. Don't miss out on these insider tips to help you find success in connecting with employers!

Fall Career Days 2018

September 11-14 @ 11:00 am - 4:00 pm

Bryce Jordan Center – Penn State University Park 127 Bryce Jordan Center University Park, PA 16802

Several employers will be recruiting biomedical/life science and public health students and graduates. A no-bag policy is in effect for this event. For details and a list of participating employers, visit the University's Student Affairs website.

Biomedical Sciences Seminar Series: Pak Kin Wong, PhD

September 19 @ 4:00 pm - 5:00 pm

Lecture Room D (Room C7619) – Penn State College of Medicine

Pak Kin Wong, PhD, Professor of Biomedical Engineering, Penn State, will present on a topic to be announced. Host is Christopher Yengo.

Biomedical Sciences Seminar Series: Brian Reese, PhD, JD, MBA, on science law

September 26 @ 4:00 pm - 5:00 pm

Lecture Room D (Room C7619) - Penn State College of Medicine

Brian Reese, PhD, JD, MBA, a 2005 Penn State alumnus (Integrative Biosciences, Neuroscience Option), will present on his career path in life science intellectual property law and how he prepared as a graduate student. The legal profession is an attractive and lucrative option for PhDs post-graduation and can leverage a variety of related skill sets.

OCTOBER

Biomedical Sciences Seminar Series: Benjamin A. Youngblood, PhD

October 10 @ 4:00 pm - 5:00 pm

Lecture Room D (Room C7619) - Penn State College of Medicine

Benjamin A. Youngblood, PhD, Assistant Member, St. Jude Faculty, St. Jude Children's Research Hospital, will present on a topic to be announced. Host is Aron Lukacher, MD, PhD.

Federal Employment Workshop: Navigating USAjobs

October 11 @ 4:30 pm - 6:00 pm

Academic Support Building (ASB) Room 2200F – 90 Hope Drive If you are interested in working for the federal government, join Karlos DelToro, Senior Federal Recruitment Advisor, for a presentation to learn more about the federal hiring process and gain hands-on experience navigating USAjobs.gov. Dinner is provided.

Registration is required by emailing Stacey Zygmunt at azygmunt@phs.psu.edu by Oct. 8, 2018.

Networking with LinkedIn

October 12 @ 12:00 pm - 1:00 pm

Room C5702 – Penn State College of Medicine

Learn how to create a LinkedIn account and develop your profile, market yourself effectively, connect with professionals, search for opportunities and demonstrate expertise. Bring your laptop or tablet to make improvements on the spot.

MEET THE NEW POSTDOC SOCIETY COUNCIL 2018-2019

2010 2010			
Position	Officer	Position	Volunteers
President	(open)	Travel Awards	Nithyananda Thorenoor
Secretary	Sophia Allen	New Postdoc Welcome & Social Events	Raquel Buj Shengchen Lin Sathi Babu Chodisetti Nithyananda Thorenoor
Treasurer	Sathi Babu Chodisetti	Community Outreach	Sreejata Chatterjee
Social Events Co-chairs	Celine Delierneux Saketh Dinavahi	Career Development	Trayambak Pathak Sathi Babu Chodisetti Sreejata Chatterjee
Professional Development Chair	Shwetank	PLaN Hosting	Raquel Buj Trayambak Pathak Sreejata Chatterjee
Society Representative	Sreejata Chatterjee Balaz Koscso		



Postdoc Society Council Members and Volunteers (left-right): Nithyananda, Balaz, Sathi Babu, Saketh, Celine, Eugene, Sreejata, Shwetank and Sophia.

NATIONAL POSTDOC APPRECIATION WEEK 2018

The National Postdoc Appreciation Week (NPAW) was started in 2009 by the National Postdoc Association (NPA) to recognize significant contributions that postdoctoral scholars make to U.S. research and discovery. Institutes from across the country participate by holding special events to create awareness.

The Postdoctoral Society at the Penn State College of Medicine like every year is organizing events throughout the week. We look forward to your participation and making this week long event a success.

September 16: Family Picnic at Dr. Eckert's home

September 17: 2017 - 2018 Travel Award recipient oral presentations

3:00 – 4:30 PM; Room C3621

September 18: Postdoctoral Orientation

2:30 – 3:30 PM; Room C5702

September 19: Postdoc Networking Breakfast with Jessica Kirkwood,

Director of Career Services

10:00 – 11:00 AM; Room C6805

September 20: Outstanding Postdoc Award Recipient oral presentations

12:30 – 2:00 PM; Room C3621 (lunch will be provided)

2017 POSTDOC FAMILY PICNIC

Postdoc Lunch and Networking 2018

APRIL

ALTERNATIVE CAREER PATH: Science Policy with:

Dr. Jennifer McComick, Associate Professor

Tobin Smith, Vice President for Policy, Association of American Universities

Kei Koizumi, Senior Advisor in Science Policy, American Association for the Advancement of Science

The science policy establishment is dominated by attorneys and politicians - competent people who for the most part have limited idea about what day to day science is like. This has resulted in increased demand of scientists in the field of policy making. The role of scientists in policy could range from aggregating, analyzing and finally communicating scientific information to a wide audience from the federal government (funding) to the public (information). Current concerns and opportunities in Science Policy include topics like climate change, applied research, stem cell research, tissue research to name a few.

Science Policy like many other careers requires learning on the job and it is important to get involved. For those who wish to embark on a career in Policy it is important to start gaining experiences from local opportunities for example campaigns or policies in the campus and or state level campaigning's. It is also advisable to apply for fellowships, short term internship (check AAAS site for useful information) or spend a summer in Washington DC (where the real action lies), attend Congressional Day visits and finally strengthen one's network. Additionally attending Science and Engineering meetings, AAAS meetings and meetings on Policy Discussion would provide ample opportunity to network and meet people of importance. For those who are serious about obtaining a formal training in Policy, there are several Science and Technology Policy degree programs available in Georgetown University, Virginia Tech and George Washington University which train scientists to understand the methodologies and develop perspective of a career in science policy.

Transition from bench to policy might not easy as most of the skills are acquired on the job. However for those interested it is important to do the homework right, get involved early and finally connect with the right people in the network.

JUNE

DATA VISUALIZATION TOOLS: with Ben Hoover, Assistant Librarian

Data visualization is a powerful tool that allows coherent visual access to huge amounts of data. Our most recent PlaN event highlighted the importance of being able to translate data into effective visual displays. The common goal of most data displays are to convey concepts that are easy to grasp or identify new patterns. Ben Hoover, Access Services & Instruction Librarian & Interim Associate Director, discussed best practices in data visualization, choosing the type of plot or display for data sets, various tools to plot high throughput data that are available, and the resources available to non-coders. The Harrell Health Sciences Library offers several platforms for users to analyze and graph diverse data sets.

For more information on services available visit the library website or contact Ben Hoover, bhoover@pennstatehealth.psu.edu.

DO YOU HAVE A PLAN?

Please contact Becky Moyer (rmoyer7@pennstatehealth.psu.edu) with your ideas!

THE COLLEGE OF MEDICINE INTRODUCES IMAGE STREAM TECHNOLOGY

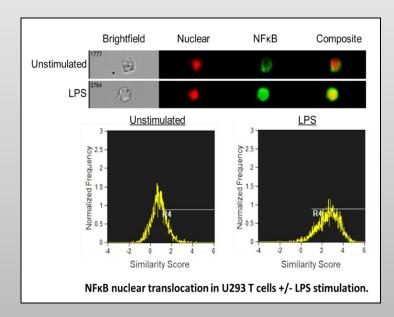
Amnis® imaging flow cytometers combine the speed and sample size of flow cytometry with the resolution and sensitivity of microscopy in a single instrument platform. This technology is unlike any other available for cell analysis.

The College of Medicine has newly acquired an ImageStream®X mkII, which can capture twelve parameters simultaneously including brightfield, scatter, and multiple fluorescent images.

The combination of quantitative image analysis and flow cytometry in a single platform creates exceptional new experimental capabilities. ImageStream is ideally suited for many applications including analysis of cell signaling, internalization, co-localization, cell-cell interactions, morphology, spot counting, and cell cycle/mitosis among others. ImageStream gives you the ability to visualize and objectively quantify expression of various targets in distinct cellular compartments on large numbers of automatically acquired images.

This is an innovative new way to analyze nuclear translocation within many cell types including small, primary immune system cells. New applications are rapidly emerging, and the flow cytometry core is working with researchers to develop useful platforms and templates for users.

For more information or to schedule time on the instrument, contact the flow cytometry core at x6908.



Do you have cool fluorescence, confocal or EM images to share?

We are looking for cover images for our newsletter "CONNECT".

An excellent way to share your research and highlight your findings!

We look forward to your contributions to this inventory of images.

Please send your images to rmoyer7@pennstatehealth.psu.edu

RESEARCH ACHIEVEMENTS

We have introduced the "Research Achievements" section to highlight and enlist the recent achievements of the postdoctoral scholars from The Penn State College of Medicine. Please send us the details of your recent achievements, including:

- Publications (News and Views, Press Coverage)
- Patents
- Talks/poster presentation at conferences
- Grant Awards

This is an excellent platform to share your interesting research, highlight your achievements and provide opportunities for collaborations.

POSTDOCTORAL ACHIEVEMENTS



Dr. Nithyananda Thorenoor Pediatrics Advisor: Dr. Joanna Floros

Dr. Thorenoor has been involved in studies on alveolar miRNome and the impact the innate host defense molecules (i.e. surfactant protein A (SP-A)) on alveolar epithelial cells and alveolar macrophages (AM).

Listed below are his recent publications and an interesting article in the BMC Blog Network.

Thorenoor N, Zhang X, Umstead TM, Halsted SE, Phelps DS, Floros J. Differential effects of innate immune variants of surfactant protein-A1 (SFTPA1) and SP-A2 (SFTPA2) in airway function after Klebsiella pneumoniae infection and sex differences. Respiratory Research. 2018. 19:23.

Noutsios GT†, **Thorenoor N**†, Zhang X, Phelps DS, Umstead TM, Durrani F, Floros J. SP-A2 contributes to miRNA-mediated sex differences in response to ozone-induced oxidative stress; pro-inflammatory, antiapoptotic, and anti-oxidant pathways are involved. Biology of Sex differences. 2017. 8(1):37: †Equal contribution.

Floros J, Noutsios G, **Thorenoor N**. Take a deep breath: Sex differences may play a significant role in the onset and treatment of lung disease in Biomed Central Blog Network on Biology, 1st June, 2018.



Dr. Sathi Babu Chodisetti Microbiology and Immunology Advisor: Dr. Ziaur Rehman

The goal of Dr. Chodisetti's research is to understand the mechanisms that regulate germinal center-mediated systemic autoimmunity.

Listed below are his most recent publications.

Domeier PP, **Chodisetti SB**, Schell SL, Kawasawa YI, Fasnacht MJ, Soni C, Rahman ZS.

B-Cell-Intrinsic Type 1 Interferon Signaling Is Crucial for Loss of Tolerance and the Development of Autoreactive B Cells. Cell Reports, 2018.

Shinde R, Hezaveh K, Halaby MJ, Kloetgen A, Chakravarthy A, da Silva Medina T, Deol R, Manion KP, Baglaenko Y, Eldh M, Lamorte S, Wallace D, **Chodisetti SB**, Ravishankar B, Liu H, Chaudhary K, Munn DH, Tsirigos A, Madaio M, Gabrielsson S, Touma Z, Wither J, De Carvalho DD, McGaha TL. Apoptotic cell-induced AhR activity is required for immunological tolerance and suppression of systemic lupus erythematosus in mice and humans. Nature Immunology, 2018.

Soni C, Schell SL, Fasnacht MJ, **Chodisetti SB**, Ziaur S.M. Rahman. Crucial role of Mer tyrosine kinase in the maintenance of SIGNR1+ marginal zone macrophages. Immunology and Cell Biology, 2018.



Dr. Sophia Allen
Public Health Sciences
Advisor: Dr. Jonathan Foulds

Dr. Allen is a Postdoctoral Scholar in the Penn State Tobacco Center of Regulatory Science (TCORS) training program. She currently works with Dr. Jonathan Foulds on his clinical trial to evaluate the effect of progressive nicotine reduction in cigarettes on smoking behavior, toxicant exposure and psychiatric symptoms in smokers with comorbid mood and/or anxiety disorders. Her primary research interests include applying epidemiology and population health methodologies to the study of health disparities to measure progress towards health equity, among the underserved with chronic diseases.

Her recent publication and its press release and media coverage are listed below.

Tobacco <u>Use Among Middle and High School Students in Pennsylvania</u> Preventing Chronic Disease, Volume 15, February 1, 2018.

Penn State Press Release: <u>Most Pennsylvania students tobacco-free, but vaping and cigarette use still a concern</u> -Vaping products may be less harmful but they are not harmless.

WGAL News 8 Story: <u>Teen smoking is down, some forms are on the</u> rise.

When is a cigarette not a cigarette? Characteristics and patterns of smokers who relight their cigarettes, Society for Research on Nicotine and Tobacco Poster Presentation, Baltimore, February 2018.



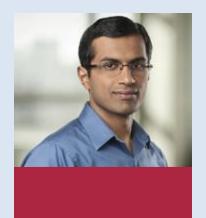
Dr. Colleen Netherby
Microbiology and Immunology
Advisor: Dr. Aron Lukacher

Dr. Netherby has recently been awarded the prestigious NINDS Ruth L. Kirschstein National Research Service Award (NRSA) for Training of Postdoctoral Fellows (F32) grant. Dr. Netherby's fellowship will investigate how immunomodulatory therapies render patients more susceptible to the devastating demyelinating disease progressive multifocal leukoencephalopathy (PML).

PML is caused by JC polyomavirus (JCV), a ubiquitous virus that persists lifelong as a silent infection in healthy individuals. The goal of this project is to determine how the adaptive immune system impacts the induction of polyomavirus-induced CNS disease.



DATA & DINE 2018 SPEAKER: SINDURA GANAPATHI



BILL&MELINDA GATES foundation Sindura Ganapathi works as a Deputy Director on the Global Health at the Bill and Melinda Gates Foundation. His work includes setting the research agenda around maternal, neonatal, and child healthcare to reduce the rates of stillbirths, prematurity, neonatal encephalopathy, sepsis, stunting, and neurodevelopmental deficits, which together account for ~70% of mortality and morbidity in children under 5.

Before joining the Gates foundation, Sindura earned a degree in veterinary medicine from Bangalore Veterinary School, masters in veterinary pharmacology from Indian Veterinary Research Institute (IVRI), followed by PhD (Pharmacology) and MBA from Penn State University. He then worked in the National Institute of Environmental Health Sciences (NIH/NIEHS) where his research focused on ion channel physiology and inositol phosphate biology.

Sindura grew up in a rural household near the coast of South India, which largely shaped his worldview and interest in global health. He accredited his success to the willingness to take professional risks and encouraged all of the post docs at the Data and Dine event to do the same. His message was clear: have faith in yourself, and use the skills your PhD training afforded you to serve your community and reduce inequity in the world.

2018 Postdoctoral Data & Dine Awards

Award:	Awardee Recipient:
OUTSTANDING POSTER	Deepkamal Karelia, Ph.D.
OUTSTANDING POSTER	Dinavahi Saketh, Ph.D.
OUTSTANDING POSTDOCTORAL SCHOLAR (1st Place)	Katie Kokolus, Ph.D.
OUTSTANDING POSTDOCTORAL SCHOLAR (2ND PLACE)	Shwetank, Ph.D.



LOCAL EVENTS FARMERS MARKETS AROUND TOWN MUSIC FESTIVALS & CONCERTS

Decked Out Live

Friday Evenings, July 27 - September 28

Time: 7:00 - 10:00 pm

Venue: The Vineyard & Brewery at Hershey

Location: Middletown, PA

Summer at the Governor's Residence

2nd Sundays August 12 & September 9 Location: Front Street, Harrisburg Venue: Governor's Residence

Craft Beer Pairing Dinner

August 12 & 15

Time: 6:00 pm & 8:00 pm Location: City Island, Harrisburg Venue: Pride of the Susquehanna-

SoMa Pop-Up Block Party

August 23

Time: 7:00 - 10:00 pm

Location: S. 3rd Street, Harrisburg

Boozy Milkshakes & Food Friday

September 7 Time: 4:00 pm

Location: 1817 N. Cameron Street,

Harrisburg

Venue: Midstate Distillery

Farmers Market in Hershey

Thursday Afternoons, May 17 - October 25 Market Hours: 2:30 - 6:30 pm

Free Concerts: 6:00 - 9:00 pm Venue: Grounds of the Cocoa Beanery

Location: Hummelstown, PA

Palmyra Producer-Only Farmers Market

Saturday May - October Hours: 8:00 - 12:00 noon Location: Palmyra, PA



Farmstead Farmers Market

Open Year-round

Hours: 9:00 am - 5:00 pm Fridays 8:00 am - 3:00 pm Saturdays

Location: Palmyra, PA

Masonic Village Farm Market

Open Year-round, Monday - Saturday

Hours: 8:00 am - 6:00 pm Location: Elizabethtown, PA

Jazz on the Veranda

Friday Evenings, August 3, 10, 17, 24

Time: 7:00-10:00 pm Venue: The Hotel Hershey

Admission: Free

Music in the Vineyard

Saturday Evenings, July 28 - September 1

Time: 6:00 – 10:00 pm

Venue: Nissley Vineyards and Winery From: April 18, 2018 - April 21, 2018

Location: Bainbridge, PA

Counting Crows

August 10, 2018 Time: 6:30 pm

Venue: Hersheypark Stadium

Fall Out Boy with Machine Gun Kelly

September 1, 2018 Time: 7:00 pm

Venue: Hersheypark Stadium



2018-19 **EXECUTIVE** COUNCIL MEMBERS

Sophia Allen, Ph.D.

Secretary

Sathi Babu Chodisetti, Ph.D. Treasurer

Celine Deliemeux, Ph. D. Saketh Dinavahi, Ph.D.

Social Events Chair Co-Chairs

Shwetank, Ph.D.

Professional Development Chair

Sreejata Chatterjee, Ph.D. Balaz Koscso, Ph.D. Society Representatives

CONNECT **EDITORIAL BOARD**

Jason Biegel, Ph.D. Sreejata Chatterjee, Ph.D. Colleen Netherby, Ph.D.

From the Director's desk...

This issue of Connect highlights upcoming **Career Development** events and workshops that are sponsored by the College of Medicine, Career Services Office. These workshops complement those offered by the Office of Postdoctoral Affairs throughout the year, and are intended to provide you with additional resources needed to develop your individual career path. I am deeply grateful to Jessica Kirkwood, Director of Career Services, for including postdocs in her events—you can meet her in person and discuss career development at a networking breakfast during National Postdoc Appreciation Week (see page 3 for details). Please take advantage of these opportunities, and stay updated by reading "Career Connections" emails.





Pictured Above: Kristin Eckert. Ph.D.



Pictured Above: Becky Mover