December Edition
Dec 3rd, 2021
Volume 3, Issue 4

COVID-19

JHU COVID RESOURCE CENTER
JHM COVID 19 INTERNAL RESOURCE PANEL
MARYLAND DEPT OF HEALTH
CENTERS FOR DISEASE CONTROL

CLICK HERE to read what we know about the Omicron variant.

CLICK HERE to read about Booster Shots: Hopkins encourages 3rd doses of COVID vaccines for all adults. Make an appointment for a booster through MyChart.

Johns Hopkins has moved to Phase 3 of reopening efforts, resuming higher-risk activities but still relying on distancing and mask-wearing in addition to providing online alternatives to in-person activities.

Universal masking was reinstated July 30 due to a rise in cases associated with the delta variant; all personnel must wear masks in JHM facilities, regardless of vaccination status, unless alone in an office with the door closed.

Meetings and gatherings indoors and outdoors should not exceed 50 people. Food and drink should be individually wrapped in a “grab-and-go” fashion.

If you experience COVID-19 symptoms, call the Johns Hopkins COVID-19 Call Center at 443-287-8500 for evaluation and guidance.

Opportunities

The Graduate Women In Science (GWIS) National Fellowship Program

Encourages women’s academic and professional careers in the sciences. $10K in funding for one academic year (July 1 – June 30) to cover various research costs. Application deadline January 10. Click here for more info.

Dolores Zohrab Liebmann Fund

Fellowship candidates must have an outstanding undergraduate record, demonstrate financial need and be attending a designated college or university. Internal deadline Dec 21

Click here for more info

JHU list of grad student funding sources
JHU list of postdoc funding sources

Calendar

Physiology Newsletter

On Dec. 1, the Peter Maloney Memorial Lecture was given by Dr. Jue Chen, William E. Ford Professor of Membrane Biology and Biophysics at Rockefeller University and Howard Hughes Medical Institute (HHMI) Investigator. The lecturership is traditionally arranged by the students, inviting a speaker they’re interested in hearing from themselves. This year we can thank Jiachen Chu and Ljubica Mihaljevic for arranging the lecture, so any students interested in helping arrange future Maloney lectures are welcome. Chen’s talk, was entitled ‘CFTR, the odd ABC transporter responsible for cystic fibrosis’ and discussed the structure of the CFTR transporter.

Dr. Peter Charles Maloney (1941-2013) was recruited to Hopkins in 1976 by neuroscience pioneer Dr. Vernon Mountcastle. Maloney rose to the rank of full Professor of Physiology in 1988 and Interim Director of the Physiology Department and the Associate Dean for Graduate Students at Hopkins School of Medicine from 2001-2013. He pioneered development of tools and experimental approaches to study bacterial membrane transporters. This year’s lecture is especially relevant because Maloney’s own work was groundbreaking in the Cystic Fibrosis field and contributed greatly to the current understanding of this disease.

Having Chen speak about CFTR and cystic fibrosis was an excellent way to further honor that legacy. “His studies have greatly impacted my work,” Chen said before her talk. Unfortunately, Maloney died December, 2013 at the age of 72 after a long battle with cancer.

To commemorate his illustrious career as a scientist and mentor at JHMI and honor his many contributions, the Department of Physiology established the Peter C. Maloney Lectureship in 2017.

The Survey Results are In!

Based on our survey results from a poll of international department members, about 60% say that they are satisfied or very satisfied with their experience with the Office of International Services since the office has moved to remote operations. Only ~15% of our international students and scholars have been dissatisfied with their experience with OIS.

Survey Results

Neither satisfied nor dissatisfied

Satisfied

Very satisfied

Very dissatisfied

Disatisfied

% of respondents

0 10 20 30 40 50 60 70 80
Dec 8: Guest Speaker Physiology Seminar at Noon
Speaker: Vivek Garg, PhD
Assistant Professor of Physiology
U. Maryland, Baltimore
"Molecular Physiology of Mitochondrial Calcium Uniporator"
Host: Dr. Qiu
LOCATION: WEST LECTURE HALL, GROUND FLOOR PCTR
Dec 10: Department Research Seminar at Noon
Seminars
Dec 15: Guest Speaker Physiology Seminar at Noon
Speaker: Yubin Zhou, MD, PhD
Associate Professor, Center for Translational Cancer Research
Institute of Biosciences and Technology & Department of Translational Medical Science
College of Medicine, Texas A&M U.
"Molecular Physiology of Mitochondrial Calcium Uniporter"
Host: Dr. Rao
LOCATION: WEST LECTURE HALL, GROUND FLOOR PCTR
Dec 17: Department Research Seminar at Noon
Seminars
Jan 7: Journal Club at Noon
IN-PERSON IN THE PHYSIOLOGY LIBRARY
Noel Getachew and Yingzhi Yi
Other Events
Nov 28 – Dec 6: Eight days of Hannukah
Dec 1: World AIDS Day
Dec 3: International Day of Persons with Disabilities
Dec 7: Pearl Harbor Remembrance Day
Dec 10: International Human Rights Day
Dec 15: Christmas Day
Dec 17: New Year’s Eve

Awards and Accomplishments
Ljubica was awarded a 2022 Travel Award to present her abstract at the Biophysical Society Annual Meeting to be held February 19-23, in San Francisco. Congratulations LJ!

Publications

Two new papers from Paul Welling’s lab were published recently:

In Doxycycline Changes the Transcriptome Profile of mIMCD3 Renal Epithelial Cells published in Frontiers in Physiology, Dr. Welling’s lab evaluated the doxycycline (DOX) effects on the transcriptome of renal epithelial cell model, mIMCD3 cells in the absence and presence of DOX (3 or 6 days), and genome-wide transcriptome profiles were assessed using RNA-Seq. They found DOX significantly altered the transcriptome profile, changing the abundance of 1,549 transcripts at 3 days and 2,643 transcripts at 6 days. Within 3 days of treatment, DOX significantly decreased the expression of multiple signaling pathways (ERK, cAMP, and Notch) that are associated with cell proliferation and differentiation. Genes associated with cell cycle arrest were also downregulated.

In Insights into Salt Handling and Blood Pressure published in the New England Journal of Medicine, Dr. Ellison and Dr. Welling review how sodium is regulated within the body. Although high salt intake has previously been associated with high blood pressure, this association has been shown to be highly variable, with individuals consuming high salt diets without adverse effects on blood pressure. Highlighted is a recent large, randomized trial which showed that consuming 25% potassium chloride, rather than the typical sodium chloride, reduced blood pressure, prevented strokes, and reduced the risk of heart disease.

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system in maintaining sodium balance. Overall, further understanding of the complex interplay between dietary salt, sodium homeostasis, and renal and the vascular systems is needed to develop more effective public health measures for combatting hypertension.