LabLink

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Director, Bureau of Laboratories
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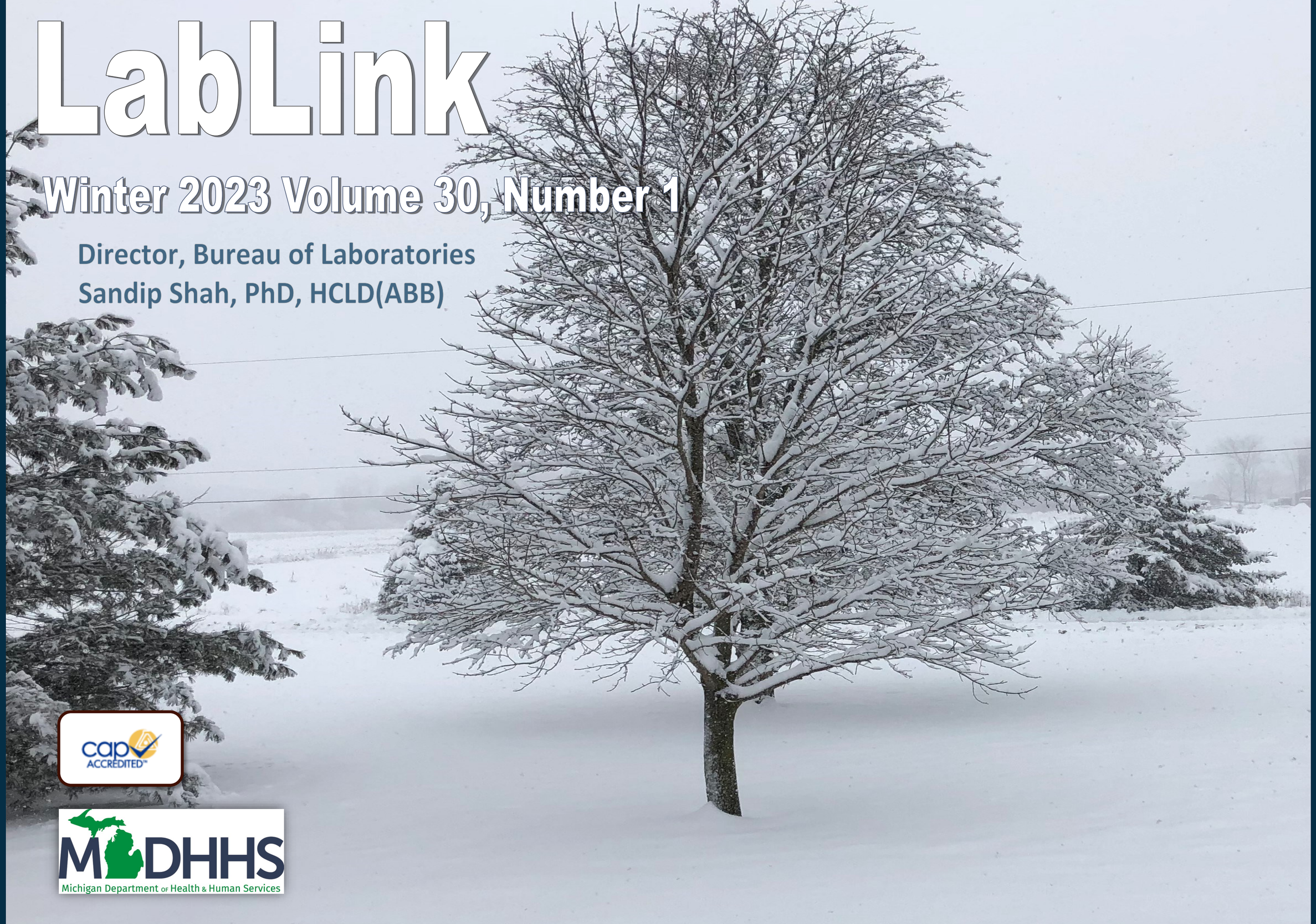

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MDHHS
Michigan Department of Health & Human Services

In this issue...

Bureau Vision

The Bureau of Laboratories is a stronger, more diverse team within an integrated public health system. We utilize advanced technology and innovative leadership to provide comprehensive public health services in our dynamic global community.

Bureau Mission

We are dedicated to continuing leadership in providing quality laboratory science for healthier people and communities through partnerships, communication, and technical innovation.

LabLink is published quarterly by the Michigan Department of Health and Human Services Bureau of Laboratories, to provide laboratory information to Michigan health professionals and the public health community.

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Editor: Teresa Miller

New Identification Assay for Dimorphic Fungi

Dimorphic molds are fungi that can exist as both a mold and yeast depending on the temperature and conditions they are exposed to. Dimorphic fungi take on a mold phase at 30˚C, but at 36˚C, on rich media, the fungi exist as yeast. Dimorphic fungi are found as mold spores in the environment. When the spores enter the human body, they convert to a yeast phase causing systemic infections. There are several important pathogens noted to cause diseases in human and other animals including *Coccidioides immitis, Paracoccidioides brasilienseis*, *Blastomyces dermatitidis*, *Histoplasma capsulatum*, and *Sporothirix schenckii*. Dimorphic fungal infections remain a major public health concern due to multiple issues including climate change and an increased prevalence of immunocompromised individuals.

Although these types of infections are significant and of growing public health concern, FDA approved diagnostic clinical assays for the identification of dimorphic fungi are extremely limited. Hologic announced the discontinuation of their Accuprobe line for the identification of dimorphic fungi including *Histoplasma capsulatum*, *Blastomyces* spp., and *Coccidiodes* spp. To ensure testing capability, the MDHHS BOL Microbiology Section validated and on-boarded testing from clinical isolates for the identification of *Blastomyces* spp., *Coccidiodies* spp., and *Histoplasma capsulatum*. The validated assay uses matrix-assisted laser desorption/ionization-time of flight (MALDI-TOF) technology. This mass spectrometry technology utilizes a laser that atomizes inactivated organisms from a target plate. The spectral profile generated from the sample is compared to a library of known profiles. Statistical analysis is run and a confidence score with an organism identification is generated. Currently, BOL is validated to run MALDI from Sabourard Dextrose Agar (SDA), Kelly's agar, and Cysteine agar from either the mold and yeast phases. For more information regarding fungal testing at BOL, please visit our website or contact Angie Schooley, TB/Mycology Unit Manager, schooleya@michigan.gov, (517) 335-9637 or Dr. Kimberly McCullor, Microbiology Section Manager, mccullork@michigan.gov, (517) 335-9641.

CDC Laboratory Outreach Communication System

Have You Subscribed to the CDC Laboratory Outreach Communication System Yet?

Centers for Disease Control and Prevention Laboratory Outreach Communication System (LOCS) provides timely information to the laboratory and testing community. Topics include emergency preparedness and response, point-of-care testing, specimen collection, antigen testing, biosafety, laboratory data reporting, and regulatory requirements, as well as training and other resources to support your work. Click here to opt in now.

Free Packing and Shipping Course Offer—
Division 6.2, Biological Substances, Category B Training

In cooperation with the Centers for Disease Control and Prevention (CDC), this free, livestream course is offered by MDHHS BOL on **January 31, 2023 from 9:00 a.m.—2:00 p.m. EST**. Course instructors are Teresa Miller, MDHHS BOL, and Andrew McLemore, Louisiana Office of Public Health Laboratory, Louisiana Department of Health.

Registration is through CDC's online learning system, CDC Train. If you do not currently have an existing account, please create one at www.train.org/cdctrain, The course link is: https://www.train.org/cdctrain/course/1103150/live_event

The course registration code **Pack&Ship2023.**

This course is designed for those responsible for packing, marking, labeling, and completing documentation for the transportation of Category B infectious substances, exempt human specimens, and use of dry ice. To receive a certificate of completion, the participant must pass an examination with practical exercises. This course does not provide certification for transport of dangerous goods; participants can only be certified by their employer. The responsibilities of employers for ensuring that employees are appropriately trained, tested, competent, and certified to pack and ship dangerous goods are stressed during the course.

At the conclusion of this course, the participant will be able to:

- Recognize the training requirements associated with Division 6.2 infectious substances
- Identify applicable regulations and requirements for the transportation of Category B infectious substances
- Summarize the potential risks associated with packing and shipping Category B infectious substances
- Properly mark, label, and document Category B infectious substances and exempt specimens for transport

Please contact Teresa Miller for more information: 517-241-0925 or by email: millert28@michigan.gov.

The Centers for Disease Control and Prevention, Division of Laboratory Systems is approved as a provider of continuing education programs in the clinical laboratory sciences by the ASCLS P.A.C.E.® Program. The P.A.C.E.® course number is 288-207-23 and is approved for 4 contact hours of P.A.C.E.® credit.

CDC Learning Connection

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