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E&T CoP: Who Are We?

Get Certified! OBRS

database translational research
serum Precision Medicine
LIMS BIOTEDOSITOTYLN2
RNA BIOTEDOSITOTYLN2
PBMC SOPIRB biobanking diagnosis
ORDATION OF CUSTODYA
plasma
chain of custody centrifuge
biospecimens

A Bi-Annual Insight on Repository Education and Training

E&T COP



TERNATIONAL SOCIETY FOR BIOLOGICA AND ENVIRONMENTAL REPOSITORIES

Biobanking 101 Corner >>>

ISBER Biobank Assessment Tool: This is a survey based self -assessment evaluation...

- ~300 questions covering many different areas
- Questions are grouped based on sections from the ISBER Best Practices
- Designed for Biobanks at all stages!
 This is a purpose-driven tool that can be tailored to the specific needs of any biobank
- Aggregated data can also be used by ISBER to see which areas show a low-compliance rate in the biobanking community for educational development purposes
- Tool is free to members; nonmember cost is \$180 USD



Best Practices-5 Highlight:

Data Management Plan—Data Security

Data Security is the practice of safeguarding the digital information by preventing unauthorized access and modifications, malware installation, theft, corruption, misuse, destruction and disclosure throughout its entire lifecycle.

Data security can be improved through the following measures:

- -Regularly running a comprehensive antivirus program and firewall software, e.g. nightly maintenance program capable of malware detection, quarantine and removal.
- Physical security of location to control manual access.
- User role access control.
- -User access authentication, i.e. strong passwords and good password hygiene, multiple layers.
- Periodic maintenance and updating plan for devices used to store and access data (man updates contain security patches)
- Decommissioning of equipment and/or software that is no longer serviced or is beyond end of life with removal/destruction of stored data.
- Encryption of sensitive and confidential data.

BEST PRACTICE: To protect against unauthorized access, repositories should employ multiple physical and electronic layer(s) of protection.

BEST PRACTICE: To protect against unauthorized release of sensitive and/or confidential data, repositories should have strict physical and procedural controls for the use of personal storage and transfer devices and channels by personnel and other stakeholders.



Key Mechanisms for data security include access control, access authentication and data encryption.

ISBER 2024 TRAVEL GRANT WINNER IS... Dr. Tilak Chandra Nath

Dr. Nath is a faculty member of the Department of Parasitology, Sylhet Agricultural University in Bangladesh. Dr. Nath holds a Ph.D in Medicine, specializing in Parasitology from Chungbuk National University, Korea and earned an MPH through the WHO/TDR Scheme. He went on to complete an MSc in Parasitology and a DVM, also from Sylhet Agricultural University.

Dr. Nath's passion for parasitology and biobanking stems from the profound understanding he gained with the realization that parasites are not only our adversaries but can also serve as valuable resources for scientific exploration. His interests lie particularly in the study of parasites and how their potential application in research and medicine.

Though funding has served as an obstacle, Dr. Nath refuses to allow this to impede his dreams of establishing a parasite biobank in Bangladesh. Using his own personal savings he to the initiative to start a small-scale parasite biobank and has managed to build a substantial collection of parasitic resources including eggs, larvae, adults and gDNA sourced from humans, animals and various environmental specimens.





Who Are We? >>>

E&T Community of Practice Member Spotlight

Steering Committee Chair Tamsin Tarling, BSc, MSc



2024 Annual Meeting
Dreaming Beyond Barriers
On Demand!

REGISTERED DELEGATES:

LOG BACK IN TO THE VIRTUAL
PLATFORM ANYTIME DURING THE
NEXT 6 MONTHS TO WATCH THE
CONTENT OF THE ANNUAL
MEETING

Tamsin Tarling is the Program Leader for CTRNet and co-leader of the BC Cancer Biobanking and Biospecimen Research Services. Tamsin has worked in the field of biobanking since 2011 and was involved in reviewing and providing input to the CTRNet Education modules. Tamsin has extensive experience establishing biobanks, both disease specific biobanks and campus wide hospital biobanks, her experience encompasses all aspects of biobanking including the consent of patients, specimen collection, management of SOPs and ensuring good governance over the collection, storage and distribution of specimens. In addition, Tamsin has done a significant amount of work in regard to biobank standards, biobank audits and biobank legacy projects. Tamsin is chair of the International Society for Biological and Environmental Repositories (ISBER) Education and Training and was on the Steering Committee for the update of the ISBER Best Practices (version 5).

Emergency Planning: Are You Ready?

Challenges due to emergency shutdowns are often seen in all activities of classical biobanks. These challenges tend to differ by geographical location. A structured SOP-driven response that includes guidance on implementing an emergency shutdown and reopening plan is critical for your biobank.

General Planning for Emergencies:

- 1. List tasks that can be done remotely.
- 2. Confirm who will be permitted to come/remain onsite
- 3. Determine who has the skills to perform required tasks.
- 4. Update rosters for freezer response and other emergencies.
- 5. Define scope of work during shutdown.
- 6. Plan for illness in team members...have a backup plan.
- 7. Test Systems for remote access to secure servers.
- 8. Review plan annually.



Scaling Down Activities:

- 1. Follow local/national & institutional instructions for continuation of work.
- 2. Define the capacity of staff to work and scope of work.
- 3. Identify all critical activities that can be ramped down, curtailed, suspended or delayed.
- 4. Identify primary and backup personnel permitted to safely perform essential activities and confirm access to all areas.
- 5. Ensure contact list of biorepository personnel, principal investigators and administrative director is up to date.
- 6. Cancel shipping for research materials that have not already been sent.
- 7. Contact loading dock/mail services to notify them of any expected incoming shipments.
- 8. Set up routine delivery of liquid nitrogen to prevent loss of frozen materials. Follow up with suppliers to ensure delivery.
- 9. Confirm call lists for emergency alarms are accurate and in effect.
- 10. Dispose of biological waste, chemical waste and sharps. Properly store all chemicals. Remove clutter from benchtops and chemical hoods. Disinfect biosafety cabinets.
- 11. Notify appropriate administrators and executive committee of the coming shutdown.
- 12. Notify any necessary external affiliates of shutdown.



Shutdown Plan:

- 1. Designate useful tasks and responsibilities to work on from offsite locations.
- 2. Determine work schedule.
- 3. Develop communication plan between director, team members and other sites.
- 4. Plan for alternative work should internet connectivity or hardware be unavailable.
- $5.\ Provide\ support\ for\ staff\ (e.g.\ mental\ health\ support\ or\ ergonomic\ awareness).$
- 6. Ensure required hardware and software are installed and can be accessed remotely.
- 7. Confirm internet access is available at all remote locations.
- 8. Evaluate whether appropriate security is maintained while working remotely.
- 9. Ensure IT support is accessible when working remotely.
- 10. Confirm the ability to access databases and records on secure servers.

Resources:

A Plan for Emergency Shutdown and Reopening for a Consortium of Biobanks https://www.liebertpub.com/doi/abs/10.1089/bio.2021.0038

Biopreservation and Biobanking 2021 19:5, 394-398

Resuming Activities:

- 1. Resume work under direction from institution as aligned with local/national regulations.
- 2. Define systems and materials needed to resume all biobanking activities.
- 3. Define any changes to Universal Precautions (PPE, sample handling, storage).
- 4. Comply with regulatory guidance for all biobanking activities, including direct patient contact.
- 5. Notify all necessary administration, external affiliates and executive committee when activities resume.

ask the experts >>>

Q: Do you have a burning question you'd like our committee to answer?

A: Please send your question to chclardy@utmb.edu and it could be selected for our next edition!



coming soon >>>

Get Qualified! Qualification in Biorepository Science (QBRS) for Technicians

In The Next Issue

Biobanking 201 Corner

E&T Committee Member Spotlight

Annual Meeting Takeaways

Ask The Experts: New Question

Why get qualified?

- Biobanking is complex! It requires highly trained and skilled staff.
- Well trained staff are essential to ensure high quality biospecimens for research as a whole.
- Before the QBRS exam was created, there was no formal qualification to define the level of expertise required to ensure quality in technical biobanking skills.

Application Process and Resources

- Forms and Resource documents available at ISBER website and ASCP websites: www.isber.org/qualification or www.ascp.org/boc/qbrs
- Resource Documents available:
 - Application Form
 - o Requirements for eligibility and eligibility assessment
 - Work experience documentation form
 - List of Regional Accrediting Bodies for North American colleges and universities as well as for those outside North America
 - o Examination topic outline
 - List of suggested readings for exam preparation (journals, texts and online materials)
 - > FAQ

Exam Requirements

- Requirements prior to application include both academic and work experience documentation
- 6 possible eligibility routes have been established

Exam Scope

- Encompasses major content areas within Biorepository Science, including:
 - Specimen Handling (collection, processing and storage)
 - o Sample/Data Inventory Management and Quality Control
 - Safety and Infection Control
 - Biorepository Operations

Exam Process

- 50 question (theoretical and procedural), multiple choice, timed, self-administered test
- Date and time chosen by test taker within 60 days application approval notification
- Cost \$240 US
- Can be repeated up to 3 times if initially unsuccessful
- Must revalidate qualification every 3 years using continuing education documentation or other educational activities as defined by ASCP-BOC

Reference: Brent Schecter, QBRS Lead