These resources are being brought to US and Canadian Program Directors and Educators from a number of different social media channels. The information provided is to help support programs and students during the transition to distance education. This material is for informational purposes only and does not constitute an endorsement by the ASCP Board of Certification. If you have additions or corrections to this resource list, please contact us at <u>PDinfo@ascp.org.</u>

CLINICAL LABORATORY – GENERAL		
 ASCP - Complete MLS Study Bundle: BOC Study Guide Enhanced 6th Edition MLS Online Review Course BOC Interactive Practice Exam Program Directors can purchase the BOC Interactive Practice Exam for their program and track their students' progress. 	Complete MLS Study Bundle	 Each component can be purchased separately. For special pricing for education programs on these products and bundles, use the <u>Education Program</u> <u>Order Form</u>
ASCP LabQ Clinical Laboratory	Available for purchase at: https://store.ascp.org/	LabQ is an online self-paced study tool composed of 18 real-life case studies. Cases present challenges faced in the lab and demonstrate how the laboratory professional or team resolves these problems.
Emory Pathology e-Learning Portal	http://www.path.emory.edu/EPeP/	Education for Clinical Chemistry, Hematopathology, Lab Administration/IT, Lab Principles, Molecular Genetics Pathology, Transfusion Medicine & Coagulation.
ARUP Laboratories MLS Faculty & Student Resource Center BLOOD BANKING/TRANSFUSION MEDIC	https://arup.utah.edu/mls/	Free online resources available to enrich the MLS students' academic experience, provide reputable curated content, and complement MLS programs' traditional and blended learning models, or hybrid programs. Topics: Hematology, Blood Bank (Immunology), Microbiology, Chemistry (Urinalysis/Body Fluids), Management, Molecular Diagnostics
AABB resources in digital format Antibody Identification: Art or Science?	http://www.aabb.org/programs/public ations/Pages/artorsci.aspx	AABB is offering a 20% discount. The books include access to a set of questions separate from the answers to provide a realistic setting. AABB grants permission to upload these two resources to internal networks.
Investigating Positive DAT Results	https://marketplace.aabb.org/ebusine ss/Default.aspx?TabID=251&product Id=13138213	

AABB Early-Career Educational Package	http://www.aabb.org/development/el earning/Pages/early-career-training- covid.aspx	Early-career professionals can access this on-demand eCast series at a significantly discounted rate for a limited time. Nonmembers can take advantage of a package that includes an early- career AABB membership, which will provide access to additional complimentary education as well as valuable members-only resources.
ASCP Case Reports – Transfusion Medicine Series	Available for purchase at: https://store.ascp.org/	The Transfusion Medicine section features 6 peer-reviewed clinical cases, each including a detailed literature review and discussion. Topics range from clinical transfusion practice, patient blood management, transplant support, immunohematology, therapeutic apheresis, stem cell collection, donor eligibility, and donor management.
Blood Typing Game	https://educationalgames.nobelprize. org/educational/medicine/bloodtypin ggame/	
Blood Bank Guy Website	https://www.bbguy.org/	Dr. Joe Chaffin offers numerous podcasts, videos, and quizzes.
American Red Cross – ARC Success Website (Transfusion Medicine)	http://success.redcross.org/success/	To set up an account use code M598STV as the password.
Blood Bank-Antibody Screen Gel (Ortho MTS)	https://m.youtube.com/watch?v=j0sZ ce7WVkY	
In The Lab - Cross Matching	https://m.youtube.com/watch?v=Dm NO3adbLUw	
Immucor Learn™	http://bloodbankknowledge.com/	 Customers number field is not mandatory. Both students & noncustomers can sign-up. 50-minute session about the principles of capture & some more advanced topics.
Indian Immunohematology Initiative	https://www.indianinitiative.org/	Instructional Videos and Case Studies.
beLearning™	https://belearning.versiti.org/	Free, just set-up an account.
Clear as Glass Blood Banking	https://www.versiti.org/medical- professionals/education/clear-as- glass-blood-banking-series	Short lectures on antibody identification & ABO discrepancies using a glass board.

Grifols	https://www.diagnostic.grifols.com/en/webinars	Free recorded webinars.
	https://www.diagnostic.grifols.com/en /tsecs	Free recorded lectures.
Patrick Tracy's YouTube channel (MLT Program Director from Wenatchee Valley College)	https://www.youtube.com/channel/U CCOYTqbZUWMGbcY8G1P4-lg	A YouTube channel dedicated to examining basic clinical laboratory techniques and tests, including simulation in blood bank.
CLINICAL CHEMISTRY ASCP Case Reports – Clinical Chemistry Series HEMATOLOGY	Available for purchase at: <u>https://store.ascp.org/</u>	The ASCP Clinical Chemistry Case Reports online series features 6 peer- reviewed cases on timely topics posted throughout the year.
ASCP Case Reports –Hematopathology Series	Available for purchase at: https://store.ascp.org/	The Hematopathology section includes 6 peer-reviewed cases. Each case is presented in detail and followed by a succinct review of the diagnostic findings and a post-test. Topics include myeloid and lymphoid neoplasia and associated molecular abnormalities, benign and inherited hematologic disorders, and coagulation pathway abnormalities.
University of Minnesota Digital Pathology Virtual Microscope Slides - Hematology, Body Fluids, Bacteriology & Parasitology	https://secure.nouvant.com/umn/tech nology/20110025/license/795	 Access to hematology, body fluids, bacteriology and parasitology microscope slides through an online database. Register & receive an email with login credentials within 48 hrs. Contact <u>umndigitalslide@umn.edu.</u> Beginning June 1, the cost of the database will be reduced to \$300 for one year. This will be an institutional license for instructors and students at your institution. In the future, the cost will increase to \$500/year.
Cellavision	https://www.cellavision.com/en/for- educators	Virtual hematology clinical rotations.
INSTRUMENTATION		
Blood Banking - BioRad IH-500	https://www.youtube.com/watch?v=t 717NtU6DUA	
Blood Banking - IMMUCOR ECHO	https://www.youtube.com/watch?v=c P-LUcX-wBg	
Blood Banking - Ortho Vision MAX	https://vimeo.com/258990328	

Blood Banking - Tango Infinity	https://www.youtube.com/watch?v=l uWq05vhWBg	
Beckman Coulter	https://www.beckmancoulter.com/	Educational section on website with videos.
IMMUCOR	https://immucor.webinato.com/regist er	Various educational webinars.
Ortho Clinical Diagnostics	https://www.orthoclinicaldiagnostics. com/en-us/home/	To view videos demonstrating functionality of the Ortho Vision and Vision Max analyzers, you will need to create a free account on the Ortho Knowledge Center. Within the Knowledge Center, users can browse an extensive course catalog that contains course name, description, reference diagrams, pdf resources and videos. Users can also view training records online, print completion certificates.
Siemens PEP	https://pep.siemens-info.com/en-us	Instructional videos with built-in assessments to track student learning.
MOLECULAR / MICROBIOLOGY ASCP Case Reports –Microbiology Series	Available for purchase at: https://store.ascp.org/	The Case Reports Microbiology section of 6 case studies seeks to review common infectious scenarios and update the learner with new information on diagnosis and treatment and to highlight less commonly encountered pathogens to add breadth to the reader's knowledge.
Austin Community College MICROBUGZ	https://www.austincc.edu/microbugz/i ndex.php	This is your online source for pictures, information, and quizzes based on Austin Community College's BIOL 2420 Introduction to Microbiology course. This website is clinically oriented.
Emory Pathology e-Learning Portal	http://www.path.emory.edu/EPeP/ba cteria.cfm	No sign-on is needed for infectious disease case studies.

Patrick Tracy's YouTube channel (MLT Program Director from Wenatchee Valley College)	https://www.youtube.com/channel/U CCOYTqbZUWMGbcY8G1P4-lg	A YouTube channel dedicated to examining basic clinical laboratory techniques and tests, including simulation in microbiology.
Biomerieux	https://www.biomerieux- usa.com/services/performance- solutions/training-and-education	
VUMIE	https://vumicro.com/	VUMIE is a "flight simulator" for the Microbiology lab, a simulation that requires the same heads-on, hands-on effort students must master in the wetlab. VUMIE 2012 is available free of charge for Summer 2020. New requests will be accepted until July 1, 2020. Contact https://vumicro.com/support/us to find
GENERAL EDUCATION (Biology, Genetic	s Anatomy & Physiology etc.)	out how to receive the offer.
BioInteractive	https://www.biointeractive.org/classr oom-resources/bacterial- identification-virtual- lab?fbclid=lwAR052bqJjs4UUa65_rE DTgM3H5SQIYZWbPL2stc8JSf2XrA C4SYPgPNkDIU	Interactive lab with worksheets.
Labster	https://www.labster.com/faculty- resources/?k=Kxr5RsZrs7j6BjYx	Labster's virtual labs engage students with science. Useful courses for medical laboratory programs include: Biotechnology, Cellular and Molecular Biology, Genetics, Microbiology, Safety
OTHER EDUCATION		
ASCP Case Reports –Cytopathology Series	Available for purchase at: https://store.ascp.org/	The Cytopathology series features 6 peer-reviewed cases on timely topics in aspiration and exfoliative cytology posted throughout the year. Each case includes a case scenario with key clinical and radiologic findings, multiple choice questions and answers, and a detailed discussion to highlight the cytomorphologic features, ancillary studies, and differential diagnosis.
ASCP LabQ Histology	Available for purchase at: https://store.ascp.org/	LabQ Histology is an online self-paced study tool composed of three real-life case studies designed to provide education specifically for practicing laboratory histotechnologists and histologic technicians. The cases present challenges faced in the lab and demonstrate how the laboratory professional or team resolves these problems.

ASCP LabQ Phlebotomy	Available for purchase at: https://store.ascp.org/	ASCP LabQ-P offers a practical self- study program designed for phlebotomist who are responsible for collection, handling, and transportation of blood.
Recorded Sessions: The ASCP 2019 Annual Meeting Lab Professionals Track	Available for purchase at: https://store.ascp.org/	Twelve sessions from the popular Laboratory Professionals Track recorded last September at the ASCP 2019 Annual Meeting in Phoenix. Topic areas covered include hematology/coagulation, transfusion medicine/blood banking, microbiology, and clinical chemistry.
BOC Study Guide: Histotechnology 2nd Edition	BOC Histotechology Study Guide 2nd edition	Purchase
BOC Study Guide: Phlebotomy, 2 nd Edition, new release	BOC Phlebotomy Study Guide 2nd Edition	Purchase
American Society of Cytopathology (ASC) Live Online Educational Series	https://cytopathology.org/page/liveon lineseries2020	Each week starting on Wednesday, April 1, 2020, the ASC will sponsor a free webinar given by an ASC Board Member to supplement teaching materials for the cytopathology fellows and cytotechnology programs during the quarantine.
National Society for Histotechnology	https://www.nsh.org/membership/cov id-19-resources	The National Society for Histotechnology has compiled a list of resources for the greater histology community, including additional resources exclusive to members. Check back for updates as they will continue to add resources as available and appropriate.
Medical Lab Lady Gill	https://www.youtube.com/channel/U CDDkaX4DtMVoW_4W6A7vqNQ?fb clid=IwAR100DINcjBRi_QJePaBCBd 3tRB1KOjZHdiQeRwRiXAoL28QSh Y0o-W_Cm8	Professor Tiffany Gill teaches fundamental Medical Laboratory techniques in step by step instructional videos.
CDC Laboratory Training	https://www.cdc.gov/labtraining?Sort =format%3A%3Aasc	CDC training site covering a variety of topics. Create a free account to use.
National STD Curriculum	https://www.std.uw.edu/	A free educational website from the University of Washington STD Prevention Training Center. Create a free account to use.

Meyer's Histology	https://www.meyershistology.com	A number of histology resources, including extensive videos explaining the histological structure of: Human Cells and Basic Tissues & Human Organs and Organ Systems, an online interactive atlas, and histology lectures. Educators and students can register for a "FREE PREVIEW" to review these resources; continued access for a minimal fee.
TEACHING RESOURCES	https://anygoodthing.com/2020/03/12	
Online Teaching Resources	/please-do-a-bad-job-of-putting-your- courses- online/?fbclid=IwAR3D79H4Vm6HW 0kpIBx- mWwho2bxDF40Gip1N0_KQTkqr5v ycJUNVxX1KaU	Recommended blog with online teaching tips.
Blackboard Help Link	https://help.blackboard.com/Learn/In structor/Tests_Pools_Surveys/Test_ and_Survey_Options	
Interactive learning objectives	https://docs.google.com/document/d/ 1zD- 	Includes resources for online instruction, interactive cases, and simulation.
Canvas	https://www.instructure.com/canvas/	Online learning platform.
Google Classroom	https://classroom.google.com/	
Camtasia	https://www.techsmith.com/video- editor.html	Good product for screen capture video and audio; has an editing function.
Evolve – Elsevier teaching materials	https://evolve.elsevier.com/education /educational-trends/coronavirus- resources/?fbclid=IwAR1fo9PkYYkT W_OOtel_2jsFdX_aUXIN4J8vGB58z kXu911e5i98-yuVKj4	Strategies, resources, and information to help you adapt your curriculum and deliver course materials remotely.
F.A. Davis	 Log in to FADavis.com (or create an account using your school email address) Navigate to a specific book or product listed on the MLS/MLT page Click on the book or product cover or title. Click RESOURCES and select the "Open Access" tab to view all available resources If there is no "Open Access" tab, that means there are no additional resources for this particular book/product. 	F.A. Davis has granted students free access to open resources on FADavis.com.

MediaLab	https://www.medialab.com/	Paid service; differentials for students; can build assignments. MediaLab's Case Simulators use in- browser virtual microscopes to help teach and assess key laboratory skills.
VitalSource	https://get.vitalsource.com/vitalsourc e- helps?fbclid=lwAR0zPr_wbRnu0J6X FF7t_UuhDsHqXmp54ta2xkgGQHbf 6pX8JfXo7k9IYRI	eBook access for students/instructors.
University of Nebraska Medical Center Higher Education COVID-19 Pandemic Recovery Guide	https://www.unmc.edu/news.cfm?ma tch=25598 https://www.unmc.edu/healthsecurity / documents/Draft-Higher- Education-Facility-Covid-Checklist- Step-I-III-5-7-2020-v1-31.pdf	Guide to aid institutions in preparing to return to in-person teaching and learning.
Emergency Teaching Procedures/Protocol Created by: Michelle Moy, M.Ad.Ed., MT(ASCP)SC Assistant Professor and Program Director Biomedical Sciences Program Madonna University	Email Michelle at <u>mmoy@madonna.edu</u> to request access to documents	Standard operating emergency teaching procedures and protocols for SARS Co-V (COVID 19) or other National/State emergency declarations, including operational checklists