ScienceBridge Tech Site Standard Operating Procedure

Title: **Bacterial Transformation Cold Solution Packaging SOP**		
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Scope	For use by biotechnology students at the ScienceBridge tech sites when packaging the Cold Solutions for ScienceBridge Transformation kits for shipment.			
Objective	This SOP sets the procedural specifications for packaging the Transformation Cold Bags.			
Materials		1 kit	Full Order (5 kits)	Final packaging
	Teacher Bag Delivery Sticker	1	1	1
	Labeled Cold Bag	1	1	1
	1. Green 0.6mL microcentrifuge tube labeled **PM1**, containing 15uL plasmid	1	5	
	2. Purple 0.6mL microcentrifuge tube labeled **PM2**, containing 15uL plasmid	1	5	
Equipment	1. Sharpie 2. Clear tape 3. Ice Box w/ Ice	1 2 in 1	1 2 in 1	1 2 in 1
Safety	Take care to ensure that liquid-filled tubes do not open during handling.			
Quantity	Prepare 1 cold bag for each teacher (all orders into 1 bag)			
Protocol	**Part I: Kit Bag Preassembly of Temperature Sensitive Supplies (Before Pickup Date)** 1. Fill out 1 teacher bag delivery sticker and affix to a sandwich bag. 2. Obtain a Styrofoam Ice Box and fill about halfway with ice using the ice machine inside the room between room 222 and 223. OF Bacterial Transformation Cold Solutions Training Video **Make sure you keep the pm1 and pm2 tubes in the box of ice** to make sure they don't defrost. The pm1 and pm2 tubes should be placed in ice before and after they are put into the sandwich bag.			

	3. Package 1 green **PM1** tube and 1 purple **PM2** tube per kit ordered into one of the labeled sandwich bags. Make sure to work quickly to keep the tubes from defrosting. 4. **QC: Make sure that the PM1 and PM2 tubes are sealed and do not defrost. Recount the number of purple and green tubes and make sure that for each color it is the same as the # ordered on the delivery sticker.** **Part II: Cold Solutions on Pick Up Date** 5. The Cold Bags will be given to the teachers separately, most likely in an ice box. Make sure they are still cold. **QC: Once all kits are finished, make sure that all the bags for each order are present and have been fully checked off on their check-off sheet.**
Documentation	All work and any variance from the protocol **must be documented**. When a teacher orders sets of Cold Bags, document # of sets in the designated tracking sheet in the OF binder under Current BT Sheets. Document updated status of each order in the OF tracking sheet and in a shared Google Sheet with date of completion. Fill out the online communication log for any SOP not completed. In the communication log, be sure to include numbers, when necessary, what was done by the end of the period, and what still needs to be done.
Storage	All materials should be stored in the **Freezer, Room 220** ● Room 220 Key, with Green Coil, found in the drawer in Ms. Yoneda's desk. ● **Must be wearing a Biotech Lanyard** found behind Ms. Yoneda's desk. Always start with the oldest dates on supplies and complete partially finished or open bags first. Product Storage ● Completed bags go inside the freezer inside the box labeled "Ready For Pickup." ● Incomplete bags go inside the freezer inside the box labeled "In Progress Bacterial Transformation Bags" Supplies Storage Locations ● PM1 and PM2 tubes inside Freezer, Room 220. ● Ice inside the room between room 222 and 223. ● Big Ice Boxes located in the backroom, Room 219, usually in a cabinet or near the fire blanket corner.
Quality Control	Use the Transformation Kit Checklist as a guide when packing the boxes. Include the checklist in each box and send packed boxes to QC immediately.

When	**Teacher Labels:** Done as soon as possible as the delivery date becomes active. **Preassembly:** Complete as soon as PM1 and PM2 tubes are available. **Pick Up Day:** Determine who will be present on the pick-up date ASAP (at least 1 group member needs to attend) to complete on the pick-up day.
Tech Site Kit: *Group*	Bacterial Transformation: *Order Fulfilment*