Wake Forest Baptist Medical Center	**CW3 Cell Washer Bleaching and Maintenance** BB.Equip.1032	**Dept:**	324311
		Dept Name	Blood Bank
		Effective Date:	
		Revised Date:	
Name & Title: CLIA Laboratory Medical Director		**Contact:**	Julie Simmons/Christina Warren
Signature:		**Date:**	

1. General Procedure Statement:

A. Purpose: To describe how to maintain the CW3 Centrifuge in order to continue proper washing and accurate results.

B. Responsible Department/Scope:

i. Procedure owner/Implementer: Julie H. Simmons/Christina Warren
ii. Procedure prepared by: Kelly Pugh
iii. Who performs procedure: Department staff/management

C. Definitions: NA

D. Sections: NA

E. Protocol:

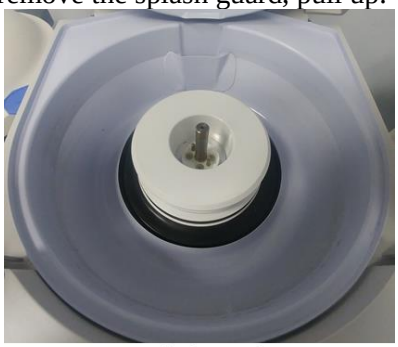
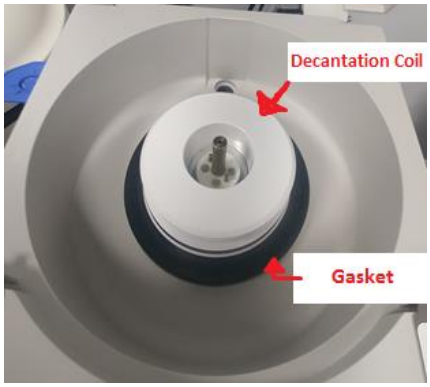
1. Wash the inside of the tank and the tubing once a quarter or if the cell washer or saline become contaminated.
2. If the cell washer is not used for a long period, drain the saline from the tank, tubing and pump.
3. Check the volume of the saline inside the tank before operation.
4. Check the tube is securely attached to the saline tank and the pump inlet connector with the hose bands. When the tube is loose, replace it.
5. Replace the drain tube and the saline tube every 1 to 3 years depending on degree of discoloration.

2. Procedure CW3 Cell washer Bleaching and Maintenance.

Section I: Maintenance

Biological Risk Assessment: Low
Chemical Risk Assessment: None
Protective Equipment: Lab coat, gloves, face sheild
Reagents: N/A
Supplies: Balance tubes, 0.5% Bleach, Buffered Blood Bank Saline
Equipment: CW3 Cell Washer
Specimen Requirements: none

STEPS	INSTRUCTIONS	CHANGE/ APPROVAL
1.0	**Make washing solution.** 1.1 Mix 20mls of bleach with 3980mls of distilled water in a container. This will make a 0.5% dilution of bleach.	
2.0	**Remove the Distributor, Rotor and Bowl by pulling up on each.**  Distributor  Rotor  Bowl	
3.0	**Clean Rotor, distributor and bowl with 0.5% bleach.** 3.1 Clean rotor, distributor, and bowl by submerging in 0.5% bleach. 3.2 Remove from 0.5% bleach, rinse with DI water, and towel dry.	
4.0	**Remove the drain cover and the splash guard from the cell washer.** 4.1 Slide pins in the directions of the arrows on both sides and pull forward on the drain cover.  Drain Cover	

STEPS	INSTRUCTIONS	CHANGE/ APPROVAL
	4.2 To remove the splash guard, pull up.  Splash Guard 4.3 Clean the drain cover and splash guard with the 0.5% bleach. 4.4 Wipe down the inside of the chamber, decanting coil, and gasket with a cloth dampened with 0.5% bleach. Be careful not to pour 0.5% bleach on the decanting coil or the gasket.  	
5.0	**Put cell washer back together.** 5.1 Place Splash guard back in cell washer. 5.2 Insert the drain cover into the drain cover holder to install.  5.3 Push the pins in the door safely until a click is heard. 5.4 Place bowl over decantation coil and push down until tight. 5.5 Place Rotor over the decantation coil. 5.6 Place Distributor on top of Rotor.	

STEPS	INSTRUCTIONS	CHANGE/ APPROVAL
6.0	**Pour out the saline from the salie tank and discard.**	
7.0	**Fill up the saline tank with 0.5% bleach.**	
8.0	**Fill up the fluid passage with 0.5% bleach.** 8.1 Hold a beaker or other container to the nozzle. 8.2 Press SALINE PRIME on the condition-setting panel to discharge 0.5% bleach from the nozzle until no bubbles come out of the nozzle. Approximately 10 seconds. 8.3 Flush the tubing by running through 4 wash cycles.	
9.0	**Pour out 0.5% bleach into container from Step 1 and refill saline tank with 3000mls of distilled water.**	
10.0	**Flow distilled water though the system.** 10.1 Hold a beaker or other container to the nozzle. 10.2 Press SALINE PRIME on the condition-setting panel to discharge washing solution from the nozzle until no bubbles come out of the nozzle. Approximately 10 seconds. 10.3 Flush the tubing by running through 16 wash cycles.	
11.0	**Empty the remaining distilled water, if any, from the saline tank and refill with saline.**	
12.0	**Flow saline through the system.** 12.1 Hold a beaker or other container to the nozzle. 12.2 Press SALINE PRIME on the condition-setting panel to discharge washing solution from the nozzle until no bubbles come out of the nozzle. Approximately 10 seconds. 12.3 Flush the tubing by running through 16 wash cycles.	
13.0	**Check volume and test pH.** 13.1 Obtain 100 ml graduated cylinder. 13.2 Place under saline dispenser in lid of cell washer. 13.3 Press the OPTION button. Record mls on Cell Washer Bleaching Form. a) Volume should be between 29-35 mls. b) If volume is not in range, retest. c) If volume is still out of range, place a DO NOT USE sign on unit and alert management and the equipment person for the blood bank.	

STEPS	INSTRUCTIONS	CHANGE/ APPROVAL
	13.4 Test pH of saline in graduated cylinder with pH paper and record pH on worksheet. a) pH should be between 6.4 and 7.0. b) If pH is below 6.4 or above 7.0, repeat wash cycle with saline and retest. c) If pH is still not in range, place a DO NOT USE sign on unit and alert management and the equipment person for the blood bank. *Refer to QC: Quality Control Duties* *Refer to Forms: Cell Washer Bleaching*	

3. Review/Revised/implemented:

All procedures must be reviewed according to document control protocol.
All new procedures and procedures that have major revisions must be signed by the CLIA Director.
All reviewed procedures and procedures with minor revisions can be signed by the designated section medical director or designee.

4. Related Procedures:

QC: Quality Control duties

5. References:

Thermo Scientific CW3 Cell Washer Instruction Manual 50144259_h, Revised 06-2018

6. Attachments:

Attachment 1: Cell Washer Bleaching

7. Revised/Reviewed Dates and Signatures:

See Document Change Control

Document Change Control			
Title: CW3 Cell Washer Bleaching and Maintenance			
Previous title:			
Written date	2/3/20	Written by:	Kelly Pugh
Validation date		Validation by	
Reviewed date		Reviewed by	
Approved date		Approved by	
Approved date		Approved by	
Effective date in use		In use by	

Revisions

Revised Date	By	MD Date	By	MD Date	By	Review Date	By	Effective Date	By
Validate Date	By	Revisions:							
Revised Date	By	MD Date	By	MD Date	By	Review Date	By	Effective Date	By
Validate Date	By	Revisions:							
Revised Date	By	MD Date	By	MD Date	By	Review Date	By	Effective Date	By
Validate Date	By	Revisions:							
Revised Date	By	MD Date	By	MD Date	By	Review Date	By	Effective Date	By
Validate Date	By	Revisions:							

Locations		Out of Use: Date:		By	
		Reason			

Date	Initials	Date	Initials	Date	Initials	Date	Initials

Biennial Reviews: Record date/initials