## COVARIS S220EVOLUTION - SOP



## PROTOCOL TO RUN THE COVARIS

- A) Turn occupied sign on door to indicate room is occupied.
- B) Disinfect all surfaces with disinfecting spray and paper towels provided.
- C) On computer screen, open Covaris software.
  - a) Using an existing shearing method:
    - (1) Select method from drop down menu at top left.
  - b) Creating a new shearing method:
    - (1) Select "new" at top left.
    - (2) On methods editor screen:
      - i. Select tube type from top left drop down.
      - ii. Select number of samples from sample diagram at left.
      - iii. Select temp range at middle right. Set no lower than 7-degree C.
    - (3) Click "add step" at center of the screen:
      - i. Set Peak Incident Power, Duty Factor, Cycles/Burst, and Duration.
      - ii. Click "OK" at the bottom of pop-out screen.
    - (4) Select "Save As" at the bottom center:
      - i. Name with user or lab last name, size range and number of samples.
  - c) Edit an existing shearing method:
    - (1) Select method from drop down at top left.
    - (2) Click "edit" under protocol drop down.
    - (3) To edit the number of tubes, select correct number of tubes at middle left.
    - (4) To method, select the pen icon at middle right.
    - (5) Edit Peak Incident Power, Duty Factor, Cycles/Burst, or Duration.
    - (6) Click "Save As" and amend name with protocol changes.
  - d) To run method:
    - (1) Click "load position" button at center right.
    - (2) Load Covaris tubes with sample inside into tube holder and hand tighten screws.
    - (3) Open door by holding door button on machine and pulling on door handle.
    - (4) Load tube holder into red rack carriage in machine.
    - (5) Close door.
    - (6) Click green "Run" button.
    - (7) Monitor progress at the bottom middle and time at the middle left.
    - (8) Click "close" run results screen when complete.
    - (9) Press load position button to bring red carriage back to the front.
    - (10) Open door by holding door button on machine and pulling on door handle.
    - (11) Unload tube holder into red rack carriage in machine.
    - (12) Close door.
    - (13) Loosen screws and unload tubes.
    - (14) Leave tube hold on paper towel to dry or reload holder with more tubes; repeat steps (2) to (13) in this section.

- Do not train others on this instrument.
- Do not fill the water bath with more water.
- Do clean all surfaces before and after use with provided cleaning spray and paper towels.

## NEED HELP OR HAVE A QUESTION?

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