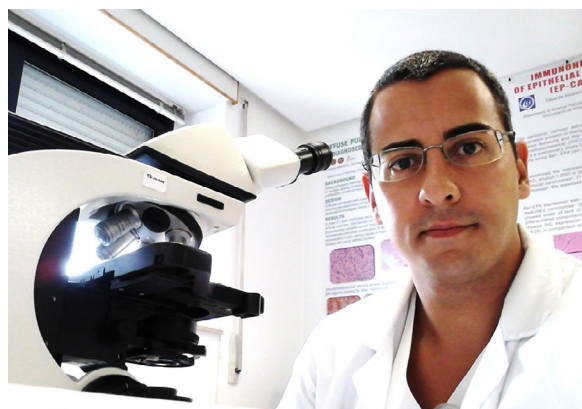


## THANK YOU FOR PURCHASING THE SAWBONES FINE NEEDLE ASPIRATION SIMULATOR (FIONA™)

This simulator helps physicians, medical students, cytotechnicians and nurses practice and refine their skills on medical puncture and fine needle aspiration, essential procedures for optimal cytology specimen collection that can help improve patient outcomes through diagnosis.

With **FioNA™**, users can now safely practice puncturing, aspirating material, and preparing cytology smears; procedures that today are commonly practiced without previous training experience and on live patients.

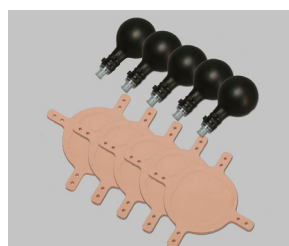
**FioNA™** was developed by **SAWBONES** in collaboration with the University of Murcia, Spain, and inventor Dr. Eduardo Alcaraz Mateos (left).

## COMPONENTS

### MODELS INCLUDE:

- 2x Extra bladders unfilled
- 2x 20 CC Syringe with luer lock for filling bladders
- 2x 20 CC Syringe with luer slip on for using biopsy needle tool
- 72x Microscope slides plain
- 5x 23G and 25G needles
- 1x Sharps container
- Aspire Gun (20cc Fine Needle Biopsy Needle Biopsy Handle)

## REPLACEMENT PARTS ([www.sawbones.com](http://www.sawbones.com))



**1940-5**  
FioNA Replacement  
Bladders and Skin Patches



**1940-1**  
20cc Fine Needle Biopsy  
Handle

## ATTACHING SKIN PATCH TO INNER HOUSING

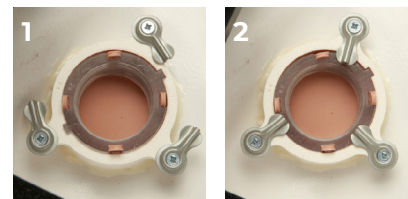
Stretch silicone skin patch over housing and attach to posts on inner housing.

## INSTALLING INNER HOUSING TO MODEL

1. Line up dot pattern on inner housing with dot pattern on outer housing attach to model.

**NOTE:** Each outer housing has its own unique dot pattern

2. Twist the 3 turn buckles to secure inner housing to model.



## BLADDER FILLING

Five target areas can house different densities and types of aspiration materials in refillable bladders - creamy, watery, or even cellular, allowing sample staining.

**Creamy filling** estimate about 100 usages without refilling or changing bladder and this option is recommended for physicians and Medical Students.

**Cellular filling** better for cyto/histotechnician institutes. Use the syringe to fill the bladders (it takes time and mature banana is a recommended fruit). Usage time – about one week if you keep re-frigated and then you need to exchange the bladder.

**Water or watery filling.** It is not a common procedure to empty cysts, but can be done and each bladder needs to be filled after one single attempt.



- Aspiration bladders last a minimum of 100 needle punctures and are easily replaceable.
- Bladders can be adjusted to simulate varying degrees of lesion protrusion past the skin line.

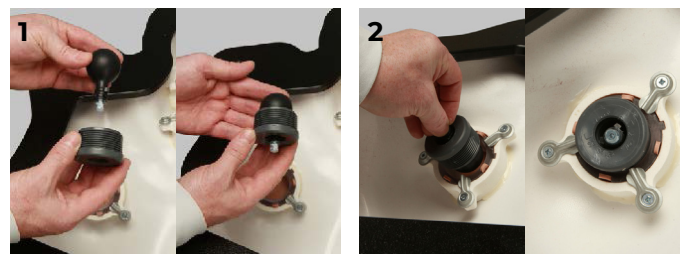
## HOW TO FILL THE BLADDERS

1. Pull all of the air out of the bladder with syringe.
2. Unscrew syringe and replace with syringe filled with desired medium.
3. Fill bladder with 20 ml. (Do not over fill bladder).



## HOW TO REPLACE THE BLADDERS

1. Insert bladder into grey threaded cap.
2. Thread bladder and cap into the inner housing. (Thread in and out to achieve desired protrusion)



## CARE & MAINTENANCE

Your model can be wiped down with any mild cleaner. Store in a dry, dark place out of direct contact with sunlight. With a little care and maintenance your new model should provide you with many years of service.