Breathing new life into cancer detection

*Cancer Center collects samples for ‘Enloe’ the dog*

Cancer has a specific odor that people release when they exhale — and “Enloe” the dog is learning how to sniff it out. Recently, the yellow Labrador, purchased by Enloe Medical Center to support the research of the Chico-based nonprofit In Situ Foundation, got a boost for his education thanks to local cancer patients and their families.

Enloe Medical Center is collecting samples of exhaled breath from willing cancer patients and their healthy family members. “Enloe” needs to sniff hundreds of these to learn how to identify cancer and distinguish its smell from that of healthy specimens, said Dina Zaphiris, In Situ Foundation’s founder and CEO.

She has been training dogs to detect cancer since 2003. At age 1, “Enloe’s” training is on track, and the beloved pup is already finding cancer in the scenting apparatus Zaphiris uses in her laboratory during training, she said.

“‘Enloe’ is motivated and extremely excited when he arrives at our training center to start work,” she said. “To him, this work is play — he thinks it is all a big game, and he’s doing extremely well!”

A simple process

Donating breath samples is voluntary, and specimens are collected at the Enloe Regional Cancer Center. New patients, as well as their families, are asked if they want to participate during their orientation before patients begin treatment, said Cancer Center Director Traci Hunt, whose family adopted “Enloe” as their pet for life.

The collection process is easy and brief. Participants are given a collection kit containing gloves, a lightweight surgical mask and a questionnaire. They put on the gloves, place the mask over their mouth and breathe normally for 10 minutes while answering the simple form. Once they’re done, they remove the mask, place it in the bag and seal and return the bag, along with the questionnaire, to the Enloe caregiver collecting the samples.

“It’s really simple,” Hunt said. “There’s no side effect. It’s just a matter of being able to tolerate the mask. The dog isn’t physically present at the Cancer Center, either, so people can donate even if they’re allergic to dogs.”

Samples are numbered for identification purposes and the donor’s name is left off for anonymity. The samples are then taken to In Situ’s training facility.

*continued on page 2...*
Bleeding control 101:
Stopping preventable deaths

Knowledge is power, and when it comes to bleeding, it can save lives — and Enloe’s Trauma Program Coordinator Jade Reese, RN, wants you to be empowered to do just that.

She and Lucas Enos, an Emergency Department RN, are taking Bleeding Control Basics, a class that teaches folks how to stop bleeding after an injury, to the public — a skill that could prove to be life-saving. The class is part of a national campaign created by the American College of Surgeons and the Committee on Trauma to increase survival rates from bleeding. Uncontrolled bleeding is the No. 1 cause of preventable death from trauma, Reese said.

“Learning these skills allows us, as a community, to be resilient and feel like we have some control over stressful, life-threatening situations,” she said.

The free class lasts about 2 hours and requires no medical training. Attendees learn how to identify life-threatening bleeding and stop it with whatever is on hand, including tourniquets and bleeding control kits. Then they practice hands-on, with Reese and Enos providing guidance to ensure participants get the techniques right.

Stop blood loss

So, how do you stop bleeding? First, make sure you’re safe and able to render aid to the bleeding person, Reese said. Next, call 911. Then identify the source of the bleeding and remove any large debris in the wound.

Then grab a T-shirt or towel, and stuff it into the wound with your fingers, applying direct pressure with your entire body weight until help arrives. This might cause pain to the person in need, but you shouldn’t let that discourage you.

“Our natural inclination is that we don’t want to hurt someone, but what we need to realize is that people can bleed to death in just a few minutes,” Reese said.

Bring skills to your group

She and Enos have taught several Bleeding Control Basics classes in Chico since December 2017 and hope to connect with community organizations that are interested in the information. But anyone can benefit from the knowledge, and Enloe Medical Center periodically offers public classes, which would display at www.enloe.org/events.

“You could come across a car accident, or be out hiking and something happens and you’re a long way from help,” Reese said. “With this class, you would know what to do.”

If you belong to a group or organization interested in learning these skills, request to host a Bleeding Control Basics class by visiting www.enloe.org/events and scrolling to the Bleeding Control Basics listing, under Classes.

Breathing new life into cancer detection

Cancer Center collects samples for ‘Enloe’ the dog

... continued from page 1

partnership has resulted in a steady stream of new training specimens for “Enloe.”

“The samples are crucial for his next months in training,” Zaphiris said. “Without samples, we have no cancer-sniffing dog!”

Both unhealthy and healthy samples are needed. In fact, healthy ones, from family members of patients, are needed in four times the quantity of unhealthy specimens, from cancer patients, so the pup can learn to ignore healthy samples.

A potentially big impact

Tiffany Capuano, a clinical research nurse at the Cancer Center, was excited when she heard Enloe Medical Center was going to collect samples for In Situ. She and four other caregivers learned how to take specimens. She said it’s amazing that something so simple and easy to do could have such a big impact, potentially leading to another tool for early cancer detection.

“We know that cancer doesn’t discriminate,” Capuano said. “Everybody has a friend, a family member, or knows someone who has been diagnosed with cancer. We all have risk factors, some more than others, and donating a sample is one simple thing we can do to further early cancer detection research, which can save lives.”

Capuano encourages Cancer Center patients and their families to give samples if they feel comfortable doing so. “You have nothing to lose, but, as individuals and as a society, we have the potential to gain so much,” she said.
Fighting heart disease means protecting men and women from the leading cause of death in the United States. Here in Chico, Enloe Medical Center plans a new Cardiovascular Care Center, which is attracting new doctors, and new technologies are helping patients today.

“The future is very bright for the treatment of heart disease in the North State,” said cardiologist Peter Magnusson, medical director of Enloe’s Cardiac Catheterization Lab.

Enloe recently recruited three board-certified, fellowship-trained cardiologists: Jessica Babare, D.O., and Prajapathi Lakireddy, M.D., both interventional cardiologists, of Enloe Cardiology Services; and Joanne Alonzo, D.O., of Northstate Cardiology Consultants.

New tools are in place for very sick patients, and an up-and-coming procedure is improving recovery after diagnostic procedures.

**World’s smallest heart pump**

Cardiologists at Enloe have been using the Impella for the past year for critically ill patients whose hearts become stressed or are not functioning well. The catheter stabilizes patients, enabling them to safely undergo procedures; improves recovery by allowing the heart to “rest” after a major heart attack; and supports patients during transfer.

**Portable life preserver**

When the heart or lungs severely fail and stop delivering oxygen to the body, this is life-threatening. But a portable technology at Enloe since 2016, called Extracorporeal Membrane Oxygenation (ECMO), can do the work of these organs until an intervention can take place. The system can bridge patients for surgery or helicopter transport to a facility with heart or lung transplant services or the ability to place ventricular assist devices.

**Enhancing recovery via the wrist**

To check for obstructions in the heart arteries or improve blood flow to the heart, doctors perform a cardiac catheterization, placing a tube, or catheter, into the artery, and stretching it open with balloons or stents. Traditionally, catheters enter through the femoral artery in the groin. Enloe is following a national trend to use the radial artery in the wrist, resulting in shorter recovery times and enabling patients to move sooner.

**Cardiovascular Care Center update**

Enloe’s future Cardiovascular Care Center, an expansion inside the medical center, is on track. Construction plans are with the state, as part of the approval process, and Enloe selected Modern Building as the contractor. As of Dec. 31, 2017, the Enloe Foundation had raised $3.9 million of its $5 million goal for the new $20 million project. To learn more or donate, visit [www.enloe.org/giving](http://www.enloe.org/giving).

The Cardiovascular Care Center will include three new procedure rooms, like this one, and new imaging equipment.

The future is very bright for the treatment of heart disease in the North State,” said cardiologist Peter Magnusson.
Beet-all pasta salad

Healthy and nutritious, this colorful pasta salad tastes delicious! It’s the perfect way to “spring” into warmer days.

Number of servings: 6

Ingredients
2 cups cooked spiral, whole-wheat pasta
3 cups fresh baby spinach, shredded
1 12-ounce jar whole beets, cut in half
¼ cup chopped red onion
2 tablespoons chopped walnuts
1 tablespoon real maple syrup
1 tablespoon balsamic vinegar
1 teaspoon extra virgin olive oil

Directions
1. Mix pasta, spinach, beets, onion and walnuts in a salad bowl.
2. Combine maple syrup, vinegar and olive oil in a small jar.
3. Shake well and pour over salad.
4. Serve immediately or cover and refrigerate until you’re ready to eat.

Nutritional information per serving: 123 calories, 4 g protein, 3 g fat, 23 g carbohydrates, 3 g fiber and 120 mg sodium

Classes, Events & Support Groups

Enloe Medical Center provides a variety of programs to promote health and wellness. Find details at www.enloe.org/events.

5/5 Walk with a Doc | Mothers Strong Stroll | Relay For Life
5/12 Growing Healthy Children
6/2 Walk with a Doc
7/7 Walk with a Doc

Donate to the Enloe Foundation

Enloe Medical Center has undertaken a multi-year project to create a Cardiovascular Care Center that will expand and improve facilities and equipment for cardiovascular care in the North State. Learn more at www.enloe.org/give or call (530) 332-4550.

Get the latest Stethoscope!

Want to receive the latest issue of Enloe’s Stethoscope hot off the presses? Sign up to have it delivered right to your email inbox. Learn more at www.enloe.org/stethoscope.

Enloe Medical Center
1531 Esplanade, Chico, CA 95926
(530) 332-7300 or (800) 822-8102
www.enloe.org

This publication does not constitute professional medical advice. Although it is intended to be accurate, neither the publisher nor any other party assumes liability for loss or damage due to reliance on this material. If you have medical questions, consult your medical professional. Images may be from ©iStock and/or ©Fotolia. ©2018 Bluespire Marketing | bluespiremarketing.com