# THE SCOTTIE GUARDIAN

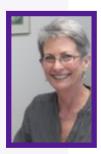
### Quarterly Newsletter of the STCA's Health Trust Fund

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Welcome to 2023 and a new Volume, Issue #1 of *The Scottie Guardian*, the quarterly e-Newsletter of the STCA's Health Trust Fund! It is hard to believe we are starting into the 5<sup>th</sup> year of our newsletter. If



you have the time, let us know how we are doing and what you would like to see addressed in these pages. We would love to hear from you!

- \* We are starting 2023 out with exciting news to report in **Research Update** about Dr. Debbie Knapp's publication of the **Scottie Screening Study** paper. Be sure to read the write up by our newest Guardian contributor, Health Trustee Raymond Formanek, Jr.
- \* We also have included a more reflective article on bladder cancer in our Scotties, and how far research has progressed over the years.
- \* Find out what are the ingredients for a successful bladder screening clinic for your club.
- \* Be sure to check out the announcements page for h several ihealth opportuities in 2023.

Thanks to the skills of our Editor, Franny Sanden, and her trusty sidekick, Ragin, we hope that you will continue to enjoy our little newsletter with a big mission: to deliver the latest and best health info for your Scotties!

Happy New Year to all and stay well!

Marcia Dawson, HTF Chairman / hijinkscot@gmail.com

Be sure to visit the STCA webpage at www.stca.biz for more details on Health and the Health Trust Fund pages, including links to the ScottiePhile Health library and HTF donation pages.

# Bladder Cancer- The Battle Continues Marcia Dawson

Aberdeen, my very first Scottie, was diagnosed with transitional cell carcinoma (TCC) more than 30 years ago when I was a senior in Vet school. I was totally blindsided and completely devastated by the diagnosis in my 9-year-old healthy, happy girl.

The senior clinician at the time gave me kind, but stark advice: take her home, take plenty of fun walks and feed her whatever she wants; then put her down. There is no cure and nothing we can do. Let her go while she is still feeling good.

A part of me died with her.

After my second Scottie was diagnosed with bladder cancer a few short years later, I got to work. Research from Japan showed a strong correlation between TCC in humans and exposure to arsenicals.

I did some in-depth testing in our well water and found a significant level of naturally occurring arsenic, a result not at the "actionable" level, according to the EPA at that time, but close to it. Maybe close enough to have an effect on a 20-pound Scottie with a genetic predisposition for this particular cancer? So, a reverse osmosis system was installed, and no more cases were diagnosed in my dogs for several years. I felt more optimistic.

#### But in reality, the Scottish terrier is the poster child for bladder cancer.

So many times I have shared in the sadness with other Scottie owners making this journey with their beloved dogs: the pink pee spot in the snow, the straining to urinate, the diagnosis of a UTI, the antibiotics that help for a short while but then quit helping; the final definitive diagnosis and shock of discovery that this seemingly healthy, active young dog has a terminal disease; the urine puddles everywhere in the house; the heart-breaking final stages of discomfort, the resistant infection that runs rampant, the kidneys that fail, the tumor that spreads, the Scottie that finally hits the wall. It is hard to keep a positive outlook.

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About 25 ago at a Purdue University veterinary conference, I was seated next to veterinary oncologist and renown bladder cancer researcher, Dr. Debbie Knapp. I had come to the conference with a sense of hopelessness having just learned of yet another Scottie diagnosed with bladder cancer. I wanted to find Dr. Knapp and see what we could do.

It was a pivotal moment, and from that time, thanks to the STCA Health Trust Fund, and the AKC Canine Health Foundation among many other generous donors, Dr. Knapp and her team have made great strides.

Anyone who has had the good fortune of crossing paths with Debbie Knapp knows that she is a brilliant and compassionate professional with the tenacity of a terrier when it comes to fighting cancer. She is down-to-earth, approachable and humble in the face of all of her accolades. She is a successful clinical oncologist and researcher in a specialty that could easily wear a person down to a small, hard rock of despair. And yet, her glass is always half full.

Recently I asked if she was optimistic about the direction that veterinary medicine is taking with diagnosis and therapy of cancer. Her response? "I feel a lot of optimism for the better management of cancer, through screening and early detection, when the cancer is more responsive to treatment, through better therapeutic strategies with new and old drugs, and for learning how to individualize care, that is, to know what treatment is most likely to help the individual."

She also is excited about the promising directions that her research is taking and the growth of interest in comparative oncology, the work that benefits not only our dogs but humans as well.

Meanwhile, the STCA continues its battle against TCC in Scottish terriers by supporting research, by sponsoring bladder cancer screening events, and by making DNA test kits available to dog owners.

Do Scottie owners have reason to hope for a future without bladder cancer?

"Yes! I am convinced that we will reach that day in which bladder cancer has far less of an impact for dogs and their families," Dr. Knapp replied with conviction.

Her optimism is contagious. We have a Scottie hero on our side!

# How to Host a Successful Bladder Screening Clinic Raymond Formanek, Jr.

Once again, the HTF is offering grants to Scottie clubs to hold a bladder screening clinic for members, friends, and other Scottie owners in their areas. This is a great opportunity to put into action what we should all be doing with our Scotties once they reach the age of 5-to-6 years: Screen at least yearly for bladder cancer with an ultrasound exam. The earlier we can detect any abnormality in our dogs' bladders, the sooner we can get a diagnosis and start them on more effective therapy.

We know that early diagnosis translates to much more successful outcomes in our Scotties. In her recently published article on the 3-year Scottie screening study (see companion article), Dr. Debbie Knapp provided compelling evidence that early detection can make a major difference in success or failure of therapy.

- Early stage cancer is not as genetically complex and mutated as later stage,
   so it is easier to treat.
- Early in the course of the disease, a dog's immune system is more robust, more responsive and better able to control cancer growth.
- Drugs are more easily delivered to a tumor in its earlier stages due to a more direct blood supply.
- Early in the course of the disease, dogs as well as people are stronger, healthier and better able to handle therapy, which can lead to a better quality of life.
- Scotties in the study who were diagnosed early had a much better response rate to therapy and enjoyed a much longer survival time than dogs diagnosed later in the disease.

In 2020, the HTF offered grants for bladder screening clinics to the STCA Regional Clubs, and five clubs took advantage of this opportunity. One of these clubs, the Scottish Terrier Club of Greater Dayton (STCGD), hosted a successful clinic not just one time but again the following year using carefully managed funds. The turn-out for both clinics was outstanding.

We asked Barb Zink, President of the STCGD, for her thoughts on some key areas in organizing a successful clinic.

"First, you have to have someone in the club who has the drive to do it," Zink said. "I've taken this task to heart. You have to promote it."

Zink said she presented study results and other information to club members showing that pesticides, contaminants in water, and genetic predisposition all figured in the prevalence of bladder cancer in Scotties.

"I stressed that early detection leads to better outcomes," she said. "There is no downside to this test," Zink said. "You get to be there during the exam, and it's not painful."

Next on the list: Find an area veterinarian with access to an ultrasound machine and who has the skill needed to detect any abnormality, however small it might be.

Zink said Dr. Gary Smith in Mason, Ohio has a "nice set-up" at his clinic to do the screening. "It took 15 minutes to do the exam and he took people in as they showed up at his office," she said. During the exams of their Scotties, Dr. Smith invited dog owners to take photos of the ultrasound screen for their own use.

After the exams, a form containing results was provided to dog owners, along with suggestions to discuss any abnormalities with their own veterinarian.

The STCGD president said the follow-up is a critical piece of the screening. "It gets everyone talking about their Scotties and their results," said Zink. "One of the key things is that some in the club, who love the process, love the results, go back to their vet and tell them about it." Results for the club's latest screening in November 2022 included: 19 Scotties registered; 18 underwent the exam; 17 were normal, and 1 was abnormal.

Bladder cancer (TCC) in our Scotties is a serious health problem. We need to beat this devastating disease to the punch and detect it as early as we possibly can. Don't wait until your Scottie is straining to urinate, passing bloody urine, and acting uncomfortable. By then, it may be too late to do much good at all.

If your club or group is interested in hosting a bladder screening clinic, contact Marcia Dawson hijinkscot@gmail.com to receive the request forms and more information.



# Research News & Update Raymond Formanek, Jr.

Scottie owners have reason to cheer at the news that Dr. Deborah Knapp has recently published her findings from the three-year Scottie screening study.

The paper, "Identification of a naturally occurring canine model for early detection and intervention research in high grade urothelial carcinoma," appears in the scientific journal *Frontiers in Oncology* (link to full article below).

Dr. Knapp's research team found that it was possible to detect the earliest stages of canine bladder cancer called transitional cell carcinoma (TCC) in asymptomatic dogs through regular screening. The researchers also found that screened Scotties, whose TCC was detected early, had a much better response to therapy than did dogs that had a more "typically advanced" cancer, often seen after symptoms appear.

"The physician or veterinarian often is left 'reacting' to the cancer and playing 'catch up' in cancer therapy," Dr. Knapp said. "Exceptions to this in humans would include the treatment of early cancer found through colonoscopy, mammography, or PSA screening. But most other cancer types in humans and most cancers in dogs are found 'late,' when therapies are less effective."

The study was unique in that it focused on detecting cancer early, unprecedented in veterinary research. A total of 120 Scottish terriers were enrolled in the study. All were at least 6 years old and had no evident signs of bladder disease. All participants received a detailed bladder ultrasound exam, after a standardized protocol to detect irregularities or masses in the bladder lining, urethra, or prostate.

Researchers examined the Scotties every six months during the 3-year study. The exams included a rectal exam to detect abnormalities in the urethra, prostate, or lymph nodes, and a urinalysis with sediment exam to detect abnormal bladder lining cells. Blood samples were banked as well.

A cystoscopy and biopsy were performed if a test was positive or suspicious. In some cases, a diagnosis was made at necropsy.

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Doors have opened as a result of this study, and Dr. Knapp and her team have many exciting and promising areas to pursue including prevention strategies; the cellular and molecular features that drive bladder cancer development and progression in dog and humans and how to circumvent that process; work to define the inherited mutations that increase bladder cancer risk in our dogs; improved use of existing dru therapies and new therapies, including immunotherapy and targeted therapies, and selection of therapy for the individual dog.

Dr. Knapp emphasized the key takeaway lesson for all Scottie owners is: Screen your Scotties early starting at 5-to-6 years of age.

Frontiers in Oncology link to full article: https://www.frontiersin.org/articles/10.3389/fonc.2022.1011969/full

### **Key Findings**

- Cancer was detected in 32 of the 120 Scotties enrolled in the study (27%) without any outward appearance or symptoms of the disease.
- The remission rate <sup>1</sup> of 42% in this study in dogs treated with single agent NSAID therapy Deramaxx, compared very favorably to the 19% remission rate in Scottish Terriers diagnosed later in the course of the disease and treated with a single agent NSAID.
- Patterns of gene expression were similar between canine tumors and human muscle invasive bladder cancer, further supporting the use of dogs as a model for the most serious form of bladder cancer in humans.
  - <sup>1</sup> Remission Rate = sum of Complete + Partial Response Rates



Dr. Debbie Knapp

## **Announcing a New Round of Grants for 2023**

The HTF is pleased to offer a new round of grants for 2023, and this time we will provide not one but two opportunities for your clubs and organizations!

- The HTF will provide \$500.00 for a Blood Draw Clinic for the Scottie DNA Bank.
- The HTF will provide \$1000.00 for a Bladder Screening Clinic.

Clubs may apply for one or both of these Grants by submitting request forms to the HTF Secretary, Helen Prince, by December 31 of 2023.

Contact Marcia Dawson hijinkscot@gmail.com to receive the request forms and more information.

**NOTE:** The HTF will also honor requests submitted by the 12/31/23 deadline for clinics to be held in 2024.

**NOTE:** The HTF will provide special collection tubes, all paperwork and instructions for the blood draw clinics. The Clubs will be responsible for location of collection site or clinic, hiring a technician or veterinarian for the blood draws, and packaging and mailing the samples with all necessary forms to Resero Genomics in Salt Lake City, UT.

Questions? Marcia Dawson: hijinkscot@gmail.com







#### STCA HEALTH TRUST FUND

**Have We Got Some Deals for you!** 

# Friday March 31<sup>st</sup> Dayton Ohio Specialty Weekend

**vWD Tests**...... \$45 plus \$10.00 registration with OFA (Checks payable to VetGen or MC/VISA credit cards accepted.)

**CMO Tests**......\$45 plus \$10.00 Registration with OFA (Checks payable to VetGen or MC/VISA credit cards accepted)

Wheaten gene test: \$45. Test is available from VetGen.

#### The STCA DNA Bank

Orders for Collection kits will be taken.

Marcia Dawson, Chair HTF hijinkscot@gmail.com

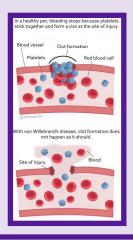
## Want to pre-order a VWD or CMO test kit?

Contact: Helen Prince, HTF Trustee

Phone: 410-586-8421; Email: haprince@comcast.net





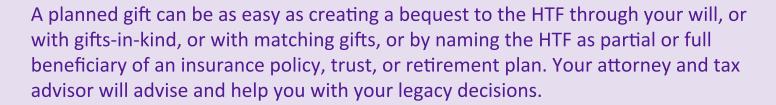


#### **LEAVE A LEGACY FOR SCOTTIES**

Among all the ways you express your love for Scotties, your support of the STCA's Health Trust Fund can be especially meaningful. Through a planned gift, you can create a personal legacy that will have a positive impact for Scotties and the Health Trust. Planned gifts are opportunities that may enhance your financial well-being and provide support of the HTF's mission during and beyond your lifetime.

With a planned gift, you will benefit in many ways:

- · Meet family, financial, and charitable goals
- · Create a legacy for Scotties
- · Maximize the value of your giving
- Reduce estate taxes
- · Defer or avoid taxes on capital gains on appreciated securities or property
- · Enhance your net estate for heirs



The HTF takes very seriously the responsibility for good stewardship of all assets donated to its purposes by its donors. With the guidance from professional financial management, HTF makes decisions on Endowment Funds, and maintains all records and provides appropriate receipts and documentation for donors. All activities will be included in an Annual Report that will be published in the Scottish Terrier Club of America publication, *The Bagpiper*.

Contact the HTF treasurer, Lisa Kincheloe, CPA, with any questions you may have. You can reach Lisa at: lkinch@pacbell.net







### **GLAD YOU ASKED!!**

This column will appear in each issue of the Newsletter. You ask the question and we'll attempt to answer it.

Q: How do I get a sample of my Scottie's blood sent in to the STCA/HTF DNA Bank?

#### A: There are five easy steps to the process!

- 1. Contact Health Trust Fund to request a DNA Sample Collection kit
- 2. Upon receipt of the kit packet, read all the enclosed instructions
- 3. Make an appointment with your veterinarian for the blood draw
- 4. Package the blood collection tube(s) in the enclosed labeled box
- 5. Mail off the box using USPS First Class mail. No expedited shipping needed!

Contact the HTF to order a kit and/or with your questions:

Michele Geiger-Bronsky email: mgbnp1@gmail.com

Marcia Dawson email: hijinkscot@gmail.com

