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# THE Sniff

News from **Medical Detection Dogs**

Spring/ Summer 2014 • Extra edition

## Addenbrooke's Hospital



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Front cover courtesy of Matthew Power photography

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## Medical Detection Dogs

Patron: HRH The Duchess of Cornwall

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## Welcome

I became involved with Medical Detection Dogs over 5 years ago after meeting with Claire Guest and going away feeling quite amazed and wanting to help.

The idea that something could make a positive difference to any health condition for anyone can be invaluable and that's what my own Medical Alert Assistance Dog Kiska is.

Having had diabetes for 42 years despite working hard to manage my condition for the last 19 years I couldn't stop the daily low blood sugars more often than not without warning. 11 years ago completely out of the blue I had my first heart attack (followed by a second a year later) then living with the knowledge the next hypo could trigger yet another one which, I might not survive became part of my life, at times placing a dreadful pressure on my family.

So when Claire suggested training my puppy to alert me to low blood sugar I jumped at the opportunity

Now 4 years on having Kiska with me has given me back my life. We don't do all the amazing things that some other partnerships do, but together just get on with everyday life.

Rather than list her achievements I think I should just say that after so many years of constant severe hypos and little warning I have had one since having Kiska and, that was when she was out for a walk with my husband!!

Kiska is not perfect and yes, she has her own mind but I have no doubt she has saved and given me back my life, she is a very special part of my family, my friend and companion.

Claire Akehurst



Everyone at Medical Detection Dogs would like to say a HUGE thank you to Royal Canin for the amazing support they have and continue to give us.



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# Looking *forward*

## Wow over 5 years!

Having reached our fifth anniversary last year it seems incredible that so much time has passed already and that we have come so far. I used to train the cancer dogs in my dining room, that's where Daisy started her training as a pup. Simone used to get the samples from the bottom drawer of my freezer for preparation and come through from my kitchen with her tray. We had no idea where it might lead, but not many people came to dinner...

Our first Christmas we hand made the cards and printed them on my Mum and Dad's printer. Our first training centre at Westcott was so cold it was normally warmer outside. It leaked when it rained despite numerous repairs and we prayed for dry weather on open days.

Look what we have achieved in five years! We have now secured the three Millfield buildings and this includes the cancer and bio-detection building and the adjoining land.

We have a number of new exciting collaborations, including with the Bucks NHS Trust, Milton Keynes Hospital NHS Foundation Trust, The Open University, The University of Buckingham and many more. There are two exciting cancer projects that will be starting soon. These will provide answers about the



CANCER DETECTION DOG DAISY

Courtesy of Emma Jeffery

possibilities of diagnosing breast cancer from a breath sample and investigate the feasibility of a secondary screen for prostate cancer in the future.

A recent analysis of our database, which now holds information on the training and screening of hundreds of urine samples, has shown some encouraging trends. Lovely Daisy, who many will have seen working, has detection accuracy of 93% for human bladder cancer. The analysis of the other dogs and cancers continue. This level of accuracy is truly amazing and reminds us (if we needed reminding) of the huge potential of this work.

The Medical Alert Assistance Dog department continues to flourish. We are learning new techniques and improving training methods all the time. We are delighted that our first nut allergy detection dog has qualified. There are now over 45 Medical Alert Assistance Dogs supporting people with diabetes, and at the beginning of August, in collaboration with Bristol University, we published in the journal PLoS One the first peer reviewed study on the reliability of dogs trained to do this work. This publication provides proof of principle evidence of the value of this work. Many thanks to everyone that participated in this study.

I sometimes hear that volunteers feel that they are not appreciated enough by the charity or by me personally for what they do. This always saddens me to hear. Everyone is valued for what they do and contribute. When the days are so busy and the hours seem to go so fast perhaps it is not always made clear.

I know everyone involved in this charity feels passionate about the work and what our fantastic dogs



Courtesy of Jarine Warwick Photography

DR CLAIRE GUEST

are able to do. I feel privileged to be part of it and to have met so many people who believe in what we do. To say we couldn't have achieved what we have without you all is easy to say, I know, but true. I always think of ripples in a pond, everyone is a ripple and we are growing into a wave.

Nearly everyone I meet has some difficulties to overcome in their lives. Those that know me are aware of mine. We have so much to do and so many people we can help, but when the hours in the day are not long enough I am reminded of the starfish story below.

*As the old man walked the beach at dawn, he noticed a young girl picking up starfish and putting them into the sea. He asked her why she was doing this. Her answer was that the stranded starfish would die if left until the morning sun. "But the beach goes on for miles and there are thousands of starfish" countered the old man. "How can your effort make any difference?"*

*The young girl looked at the starfish in her hand and placed it safely into the waves. "It makes a difference to this one" she said.*



You have all made the difference.

**Dr Claire Guest**

Chief Executive and Director of Operations

# Zeta the pioneer

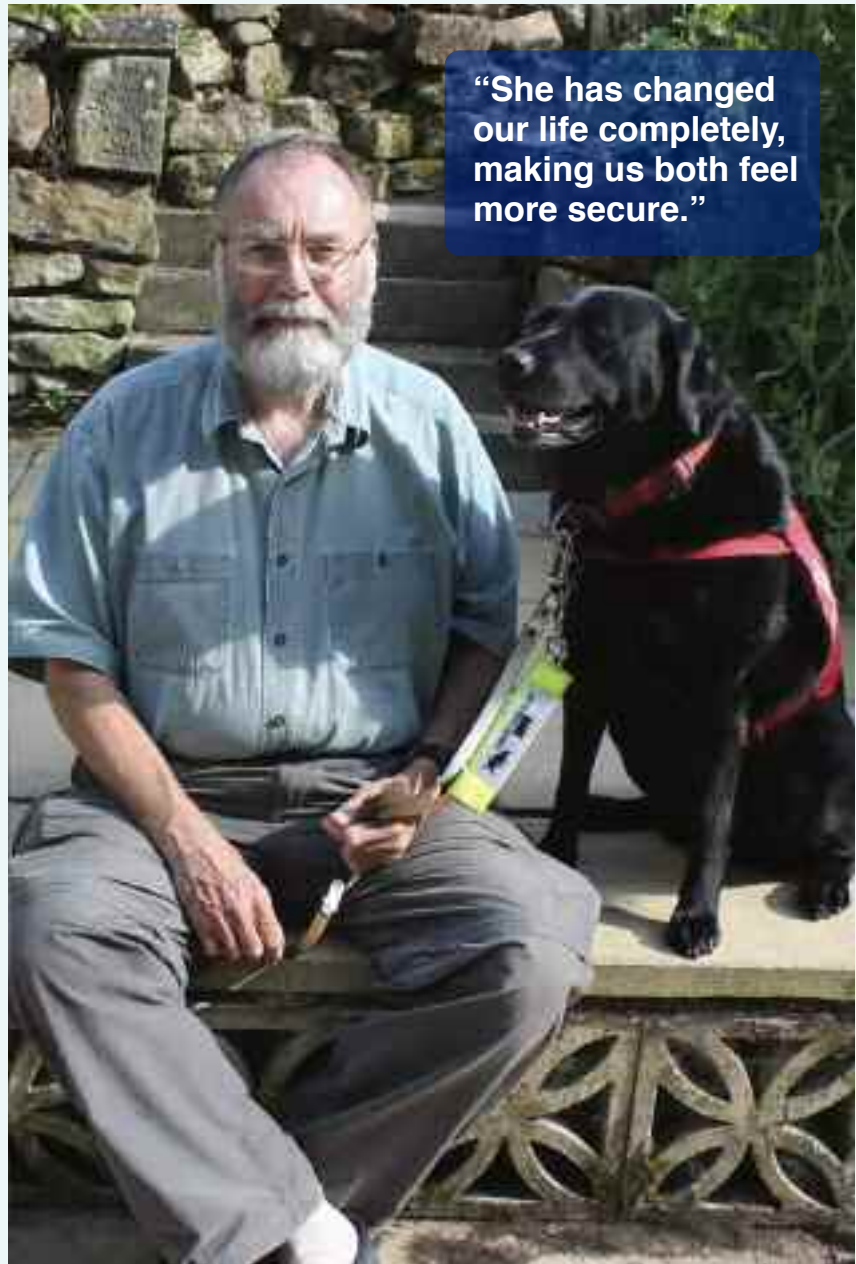
By ANGELA KEARTON

**Zeta started her life as a Guide Dog puppy but went on to become the first Diabetic Hypo-alert Dog in Britain.**

As a young puppy she came into our home, a small black bundle of naughtiness. Unfortunately (or fortunately!) she developed elbow dysplasia at eight months and had to take medication. Eventually at eleven months she was declared not fit enough to be a Guide Dog and we were allowed to keep her as our pet.

Meanwhile my husband Cherry, who has been an insulin-dependent diabetic since he was 29, began to lose his hypoglycemic warning symptoms. I was so worried whenever he went somewhere on his own. I had heard about “Diabetic Alert Dogs” and I searched the internet and found that such dogs existed in Australia and North America. I emailed the organisations concerned for help, as I had no idea how to train Zeta to alert, but they would not give me any instructions.

After many days of phone calls I found Claire Guest. She was so enthusiastic about helping and she came to stay with us for a few days. She taught me how to train Zeta to alert when Cherry’s blood sugar was low and amazingly Zeta “caught on” very quickly. The first time Zeta alerted I became very emotional and cried, because I did not really believe that alerting was possible. At first we thought she was making errors, then realised that she was catching highs and also rapid drops in his blood sugar levels.



CHERRY AND MEDICAL ALERT ASSISTANCE DOG ZETA

Zeta just got better and better at alerting. Claire told us to stop giving her treats, but unfortunately Zeta does not work without treats and who can blame her! She has changed our life completely, making us both feel more secure. My husband, who is quite shy, enjoys using her as an “ice-breaker”. He is amazed at how many diabetics, or diabetics’ relatives, have stopped him in shops or in the street. The

mathematics students at the university love her and she is well known in Durham city.

Zeta has one fault: she doesn’t like night duty! She sleeps and snores through everything. Well, after alerting my husband a few times a day, I suppose she deserves a well earned rest. We really don’t know what we would do without her: she is worth her weight in gold!



# Polo's Cornish adventure



**Last summer Polo and I went to Cornwall. We had a lovely cottage with a glorious lake outside the garden. Polo being a Labrador loves water so you couldn't keep him out of it!**

He had nice days out but he still liked the lake the most. We had lovely days on the canoe and Polo liked to watch all the ducks and birds fly past. Sometimes he tried to jump in!

My cousin Milly came with her mum and dad and they have a little dog called Pippin. Polo and Pippin are best friends and love to play together so spending a whole week with each other was great. They both had to wear life jackets because Pippin can't swim and Polo just has one for safety because he is too precious. We had a great long dog walk up a large hill called Brown Gelly. It is an ancient burial ground and was a lovely walk. The dogs were tired afterwards but we found many things going up the hill and both down. We took some lovely

photos of the dogs and the view from the top was amazing! The only thing with coming back down the hill, were the cows! There were lots of them and they were very interested in us. My cousin, Milly and I were a little scared!

Polo loves ducks and likes to watch them fly about. My uncle and my dad brought remote control boats on holiday and my dad's was big and my uncle's was quite little. Polo started to swim around and then he saw the little boat and started to swim after it eventually he got hold of it. He would not stop chasing the boat, he thought it was a duck! Naughty Polo!

Polo also had to do a bit of shopping which he didn't mind but I think he would have preferred to be in the lake. After about a day Polo was really clever as he alerted to my low blood sugar even though he was swimming in the lake most of the time!

*Gemma aged 11.*



GEMMA AND MEDICAL ALERT ASSISTANCE DOG  
POLO

# It's Training Cats and Dogs...

That makes them our best friends.

Jan Shillum finds out more from animal behaviourist  
Dr John Bradshaw.



**He's a Biologist, Anthrozoologist,\* advisor to Medical Detection Dogs, author of two books on animal training,\*\* and the man responsible for last June's fascinating BBC 2 Horizon programme, *The Secret Life of the Cat*.**

Dr John Bradshaw BA PhD founded the world-renowned Anthrozoology Institute at the University of Southampton and is now its Visiting Fellow and Director at the University of Bristol's School of Clinical Veterinary Science. He has studied animal behaviour for more than 25 years so knows all about the way cats and dogs think.

Well, that's not strictly true as Dr Bradshaw explains: "At the cutting edge of dog cognition there is interest in the way dogs think and a

debate about how much they understand thinking or whether they just react to what they see." So they don't read minds then — I wonder aloud how our lovely dog Meg knew even before I reached for the lead that we were going 'walkies'? "Dogs are very good at reading body language," he laughs, "they are much more sensitive to things like that than almost any other species on the planet."

On a more serious note he says: "there are new possibilities being

explored that mean we may one day find out. There is now one dog that has been trained in the US to lie still in an MRI scanner, though training it to be immobile during the process could affect the readings, it may be possible to see brain patterns that show thinking."

I just wish Dr Bradshaw's book had been around when we had our second 'rescue' dog, Jake, a crazy, mixed up Afghan/Retriever cross who'd already been re-homed twice and who absolutely hated being left alone. His approach to this common problem makes complete sense when you think about it logically: "You train your dog to sit on command," he says. "You should

\*Anthrozoologist, someone who studies human/animal interactions.

\*\*Dog Sense: How the New Science of Dog Behaviour Can Make You a Better Friend to Your Pet is now available in paperback from Penguin Books who also published Cat Sense in hardback last August.



also train your dog to cope with being left alone." He suggests creating a gradual routine when you leave the house, picking up your keys and coat from the same place, in the same way each time you leave. "Those behaviours will become triggers for your dog, who will associate them with your impending absence.

"You go to the door. You come back from the door. You put the coat back on the rack. You put the car keys back down on the shelf. Then you do it again, but this time maybe you open the door," he explains. "Then the next time, you go outside the door and come straight back in again. And the next time, go outside and stand outside for 10 seconds. And then come back in again. And the dog learns the association with you going out and you coming home. And that is enough for most dogs to reassure them — and very quickly you find you can leave them for hours. They've learned that association and you coming back and making a fuss of them, and so the idea of you going out actually becomes pleasurable instead of something to panic about."

His theories on cats are just as fascinating as anyone who saw last summer's *Secret Life of the Cat* programme will know. This unique experiment used techniques pioneered by Alan Wilson, a world expert in tracking wild animals; 50 miniaturised versions of the GPS tracking collars he uses in the wild were made, (some with the addition of video cameras) and attached to 50 pet cats living in the village of Shamley Green in Surrey. What went on when the cats roamed around the village at night surprised even Dr Bradshaw. They time-shared territories in order to avoid a rumpus with a near neighbour, most didn't roam that far preferring the safety and comfort of home, (an indication apparently that they are becoming less independent) and several enjoyed midnight snacking, poaching their neighbour's cat food

by means of cat flap burglary during the wee small hours.

Dr Bradshaw's theory that cats remain hunters because we 'employed' them to catch mice and rats on our behalf is I'm sure correct but it looks like they are becoming less so. The prey caught during the week's investigations included birds, mice and a mole but they weren't consumed. Contrary to popular belief he doesn't think that cats leave corpses as 'gifts' for their owners, instead he believes cats are far more pragmatic and simply prefer the taste of modern, sophisticated cat food. That theory is based on the years after university that Dr Bradshaw spent working for Pedigree Pet Foods, exploring how dogs and cats use smell and taste to communicate and choose food.

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## "What can be done with a dog's nose is only limited by human imagination,"

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So does he have a preference — dog or cat? "It's like comparing strawberry jam and cheese — both have charm and abilities — dogs could kill, like cats do, if they chose to but they so much want to please us that they are easier to train — there's a reason our charity is not called Medical Detection Cats," he jokes. "My parents didn't like dogs so I didn't grow up with them and I got my first cat as a student in the 1970s, it was going to be drowned. I ended up living with two cats and a dog in my one room 'digs' but we all got on. We don't currently have any animals at home as we're in the process of moving house and it wouldn't be fair."

In fact Dr Bradshaw spent his first 10 years of research, when he

returned to academic life in the 1980s, studying olfaction and behaviour in insects and then how moths find each other. "There's a whole alternative universe dominated by smells," he tells me. His latest book, *Cat Sense*, has a chapter devoted to their sense of smell. "What can be done with a dog's nose is only limited by human imagination," he says, "they can do so much, detect rare species, find bombs and missing people after earthquakes — though they are even training rats to do that now but obviously they have to be on a long line or they won't come back. They are even training bees to detect TNT. We humans have very poor noses so it requires a real leap of imagination for us to discover what kind of animals we can train."

His best advice to dog owners is to realise that dogs are neither wolves nor furry humans and that owners have certain responsibilities to make sure their dogs are psychologically healthy. He says he's spent much of his career debunking bad advice given to dog owners; dogs, he maintains should be trained through reward not confrontation. He debunks the dog-as-wolf myth saying "my theory — and I have nothing to back it up — is that something happened in the brains of certain wolves that enabled them to socialise with members of their own species while simultaneously establishing and maintaining relationships with ours. Humans developed a propensity to take in pets and then these particular wolves came along. This was not an intervention on our part but rather a very different cultural environment.

"Science has, unwittingly done the most damage to dogs by applying the comparative zoology approach to studies of dog behaviour. Comparative zoology is a well-established and generally valuable way of understanding the behaviour



and adaptations of one species through comparisons with those of another. Yet although the applications of comparative zoology are usually benign, it has done considerable harm to dogs, as one expert after another has interpreted their behaviour as if they were, under the surface, little altered from that of their ancestor, the wolf.

“Wolves, which have generally been portrayed as vicious animals, constantly striving for dominance over every other member of their own kind, have been held up as the only credible model for understanding the behaviour of dogs. This supposition leads inevitably to the misconception that every dog is constantly trying to control its owner—unless its owner is relentless in keeping it in check. The conflation of dog and wolf behaviour is still widely promoted in books and on television programmes, but recent research on both dogs and wolves has shown not only that it is simply unfounded but also that dogs who do come into conflict with their owners are usually motivated by anxiety, not a surfeit of ambition.”

Dr Bradshaw’s enlightened and humane understanding of animal behaviour has led to him advising



on the training of military sniffer dogs. “I have more to do with deployment and welfare aspects, for instance: how long can this dog work in Afghanistan in all that dust and dirt? It’s very stressful but they want to do it for us. When they stop enjoying it they should be allowed to stop working. The dog has been

our faithful companion for tens of thousands of years. Today, dogs live alongside humans all across the globe, often as an integral part of our families. To many people, a world without dogs is unthinkable. We really haven’t yet reached the limits of what we can do with animals.”



Dr John Bradshaw is a Visiting Fellow and Director of the Anthrozoology Institute at the University of Bristol, where he was formerly Reader in Companion Animal Behaviour and University Research Theme Leader for Animal Welfare & Behaviour. His main interests are in the behaviour and welfare of domestic cats and dogs, and their relationships with people; he has published over 100 research papers and book chapters on these topics. Recently he has retired from full-time research to concentrate on the dissemination of animal welfare science to the general public: his book “In Defence of Dogs/Dog Sense” was a Sunday Times and New York Times non-fiction bestseller in 2011 and has been translated into ten languages.

He has also studied the behaviour of olfaction in a wide range of species, including dogs, which led to his interest in the activities of Medical Detection Dogs.



# Cerys & Wendy



Courtesy of Emma Jeffrey

## **Cerys was diagnosed with Type 1 Diabetes when she was just two years old.**

She had hypos almost every two hours throughout the night for the next three months. These sometimes lead to seizures. Her diabetes was proving already to be difficult to control.

She then went onto a pump which was able to administer the very small amounts of insulin Cerys required. After a year of nocturnal hypo unawareness, which meant Cerys never woke for hypos so she often crashed at night.

Cerys endures up to 15 blood tests a day and through the night, just to keep her safe. We can not predict if her blood glucose will plummet or rise rapidly so we are constantly second guessing. Everything affects her levels, food, high or low GI food, exercise, excitement, stress, illness and the weather to name a few. She has very little awareness of hypos and rarely shows any symptoms. She still

“

She makes me feel safer and is so clever sniffing me and giving Mummy the kit to test me.

”

never wakes from hypos at night. We are unable to leave Cerys without one of us nearby with the testing kit and glucose, except at school where she has full time one to one care by a specially trained TA.

Now this situation is changing as we have had the extreme good fortune to receive the beautiful and amazing dog, Wendy. Within only one month, she has amazed and astounded us. The first evening Wendy came home with us, she started to alerting to hypos and hyps. Even a 2.7 in the night!

She has alerted while shopping, at a party, while Cerys played football and gymnastics. She is even able to alert us before Cerys has a hypo or hyper so that we can act earlier.

As Cerys' mother, I was overwhelmed and couldn't believe how this very special dog would be able to change Cerys and all of our family's life. The support the team at the charity have given us is second to none. Nothing is too trivial. They are with us every step of the way. It is truly magic the way they have trained Wendy. We will be forever grateful.

We can now look forward to Cerys having a safer, healthier life day to day with fewer severe hypos. In the future, we hope Cerys will gain some independence with Wendy by her side giving her the confidence to live life to the full.

**Debbie** (Cerys' mum)

# DOGGIE PADDLE



## *up the Thames*

Doggie Paddle up the Thames makes a fabulous £30,000 for Medical Detection Dogs



Doggie Paddle Photographs by Dianna Bonner [www.WorldVisionPhotos.co.uk](http://www.WorldVisionPhotos.co.uk)

An amazing fundraising committee, headed by Stewart Humphrey, organised a superb summer dinner dance and auction on board a City Cruiser on the Thames on 12th June, to raise money for Medical Detection Dogs.  
[www.citycruises.com](http://www.citycruises.com)

The committee was made up of Lesley Nicol (Medical Detection Dogs Ambassador and Mrs Patmore in Downton Abbey) Debbie Arnold

(Actress and voice artist. Debbie is known for her work on British television, which includes portraying April Branning in EastEnders between 1995 and 1996. Debbie is also a stage actor) John Love (Director of Another Tongue - London agency supplying voice over artists for TV and Radio campaigns.) Sarah Miles and Jimmy (Medical Detection Dogs Partnership) who all worked so hard to create this unique and fun event.

It seems quite a while ago that Debbie Arnold came up with the unique idea of having a summer event on the Thames called "Doggie Paddle up the Thames". Such a great and unique idea and what a wonderful way to see London at night.

Over 200 revellers met the boat, covered with Medical Detection Dogs balloons and bunting, at Westminster Pier and were offered



the chance to win a £6,000 diamond in a glass of champagne. The diamond was most kindly donated by Gordon Marks of Cobham [www.gordonmarks.com](http://www.gordonmarks.com)

Tru Diamonds, [www.trudiamonds.co.uk](http://www.trudiamonds.co.uk), provided all the Zircon imitation diamonds for each champagne glass, a stunning diamond necklace for the auction, and also gave each lady a beautiful drop necklace as a memento of the event.

Flowers were by Moonflower of Cobham [hello@moonflowercobham.com](mailto:hello@moonflowercobham.com) and they looked beautiful.

Julie Peasgood (English actress, television presenter, author and voice over artist) was MC for the evening and kept the momentum going in such wonderful style. Her distinctive voice was known to our guests and we are truly grateful to her for doing such an amazing job.

Lesley Nicol, who plays Mrs Patmore in Downton Abbey, asked her "below stairs" actor friends to join us at the event and they turned out in force. Jim Carter who plays Carson, Sophie McShera – Daisy Mason, Phyllis Logan – Mrs Hughes, Rob James Collier - Mr Barrow . They were all wonderful mixing with guests and having "selfies" taken. We are indebted to them all for spending time with us all.

We also had the privilege of having Robert Powell, Matthew Kelly and Chris O'Toole, Vicky Michelle, Sally Farmiloe, Mark Williams Thomas on board and they too were amazing in chatting to everyone and joining in the fun.

Jim Carter made a fabulous auctioneer and with his wonderful presence the audience bid on some fabulous lots:

- White Star Charters made it possible for Medical Detection Dogs to purchase a holiday for 10 people with full crew on The Lady Tatiana yacht, based in Palma, at a discount rate for the auction [www.whitestarcharter.com](http://www.whitestarcharter.com)



- Quality Cottages donated a one week holiday for 8 guests in one of their amazing and beautiful cottages in Pembrokeshire [www.qualitycottages.co.uk](http://www.qualitycottages.co.uk)
- The Caravan Club donated a caravan holiday at Hillhead, Brixham, Devon for one week for 4 adults [www.caravanclub.co.uk](http://www.caravanclub.co.uk)
- Manchester United donated a shirt signed by the whole team and a fabulous hospitality package for 2 people [www.manutd.com](http://www.manutd.com)
- Paradise Wildlife Park donated a one night stay for two people at the Big Cat Sanctuary, staying in a lodge, feed the cats and an individual tour [www.pwpark.com/experiences/big\\_cat\\_experiences](http://www.pwpark.com/experiences/big_cat_experiences)
- Panasonic donated a Lumix camera and Apple iPod Touch [www.panasonic.com](http://www.panasonic.com)
- Signed cap from Mercedes AMG/Petronas signed by Paddy Lowe and Toto Wolff [www.mercedesamgf1.com/en](http://www.mercedesamgf1.com/en)
- Caterham Formula 1 donated a drivers team shirt signed by the drivers [www.caterhamf1.com/home](http://www.caterhamf1.com/home)
- Pastel Portrait of your Pet by Bridget Wood. Amongst Bridget's clients have been the Queen and the Duke of Edinburgh, the Duke and Duchess of Westminster [bridgetwood2011@gmail.com](mailto:bridgetwood2011@gmail.com)

Every lady on board received an invitation to join the Fabyouless revolution and enjoy thousands of offers from leading beauty salons, nail bars, tanning salons, hairdressers, spas, clinics, gyms and



personal trainers – nationwide. [www.fabyouless-card.com](http://www.fabyouless-card.com)

A most generous donation from SEB the leading corporate and investment bank in the Nordic countries, serving large corporations and financial institutions with corporate banking, trading and capital markets and global transaction services. [sebgroupp.com](http://sebgroupp.com)

We are incredibly grateful to everyone for their support and generosity towards Medical Detection Dogs.

With celebrities and guests on board, Dr Claire Guest, Chief Executive of Medical Detection Dogs talked about our work and studies. Rob Harris and Lydia Swanson presented a cancer demonstration with cancer detection dogs Ulric and Lucy. This was a wonderful opportunity to showcase our work to many new supporters.

We had the most amazing singers to entertain us. Uche Eke and Soul Man have beautiful voices and made the party swing with many guests dancing the night away. A huge thank you to both of them for their professionalism and continued support of Medical Detection Dogs. We can certainly recommend Uche and Soul Man for your event [www.soulfullysung.co.uk](http://www.soulfullysung.co.uk) and [www.soulmanbiggs.vpweb.co.uk](http://www.soulmanbiggs.vpweb.co.uk) Medical Detection Dogs would like to thank Stewart, Debbie, John, Lesley and Sarah for their enthusiasm and the time they spent on making Doggie Paddle up the Thames a truly successful and fun event and for achieving a superb outcome of £30,000 for which we are so grateful.

# Abingdon Prep School for Boys learn more from visit



On Thursday 6th February 2014, Medical Detection Dogs HQ welcomed some visitors from Abingdon Prep School for Boys, an Oxfordshire school which has adopted us as one of its charity partners for this year. 15 boys aged between 10 and 13 years old had a morning to come and see some of our dogs in action and learn more about what we do.

The boys were treated to demonstrations from trainer Dawne with Tilly, who showed them how scent training is established. Using a dummy scent pot Dawne demonstrated how positive reinforcement methods are able to quickly teach the dog to detect a particular smell, and also showed the boys what a typical "alert" would look like.

Rob, our Bio-detection Manager then stole the show with Jack, trainee bio dog, who demonstrated how typically our cancer dogs would work on the carousel or stands. A very energetic Jack also went on to demonstrate finding odours hidden on the body. The boys were enthralled with how much Jack loved his work, and how what seemed like a fun game to Jack can be potentially life saving.

For most this wasn't their first contact with the charity as since September last year these boys and others from their school have been learning about us. They have to date held a number of fundraising activities on our behalf, raising money to name a puppy. These events have included a dog "dress down" day, a 2p challenge, and a raffle at Christmas. They have also been gathering dog toys and treats and they brought with them a fabulous hamper of goodies which many of our dogs will benefit from very soon.

For more information on how we can support schools, please see our website.



Stylish contemporary  
dog accessories

*Supporting Medical Detection Dogs by  
supplying collars and Leads for qualified dogs*

Oscar & Hooch was set up primarily due to the love of dogs and specifically two chocolate Labradors- Oscar & Hooch. The owners (Paul & Elaine) were keen to work with a dog related charity. Medical Detection Dogs quickly became a really good fit - the dogs are extremely happy and all a valued part of the family they work with, and of course the work they do is lifesaving. With previous careers in Pharmaceuticals, the important day to day work as well as the research carried out at Medical Detection Dogs had real resonance with Oscar & Hooch. Of course the final decision was simple after meeting founder Claire Guest, her passion and enthusiasm along with all of the volunteers is amazing- this is what makes the charity so special and is why Oscar & Hooch are proud to be an advocate.

[www.oscarandhooch.com](http://www.oscarandhooch.com)



## VOLUNTEER STORY

# Kirstie



I first came across Medical Detection Dogs at a local school fete, and couldn't believe that such innovative, fascinating work was happening on my doorstep. I had recently lost my mother to breast cancer and was particularly interested in the work that the charity was doing regarding the detection of early stage cancers. I resolved to see if there was anything I could do to help.

My main involvement at first was through puppy socialising. I have

had several dogs, some who have stayed months and others just days. All have stolen a piece of my heart in some way and most have gone on to be, or are in the process of becoming, fully fledged assistance dogs. Many people have asked me how I can bare to give a dog back! It's impossible not to be emotionally attached but what they don't realise is how rewarding it is to have had a small part in the incredible journey that these dogs undertake, and to have seen that when they are successfully matched, what a huge difference they make to someone with a life-threatening illness. It is that which keeps me, and other volunteers coming back for more.

In addition to involvement directly with the dogs, I am helping to co-ordinate a project for schools and other youth groups. The aim of this project is to raise awareness of the charity and some of the health conditions that people deal with on a daily basis. I have developed ongoing partnerships with schools that have made us their "charity of the year", and also visited

numerous schools and groups to hold assemblies and talks. We are finding that the dogs are a real trigger for learning in so many ways and across all age groups, and have had some very positive engagement from children that perhaps are not always otherwise so motivated. I am working on getting more resources available for this project with the aim of being able to reach schools and groups across the country, not just in the vicinity of the Medical Detection Dogs Centre.

In whichever role, I have found volunteering for Medical Detection Dogs to be fun and rewarding. I am always proud to attend events as an ambassador for Medical Detection Dogs, be that on the stand at Crufts or collecting money outside a local supermarket. I love telling people about the wonderful work that the charity already does and the huge potential it has, and I have met some fabulous like minded people along the way. It is a privilege to be a part of the team.

**We need your help looking after our puppies and young dogs during their training. This is such a rewarding role. It is not easy to hand a puppy or young dog that you have become attached to back, but when you see them progress and become a special part of a family whilst supporting someone living with a life-threatening health condition it really does make everything worthwhile.**

As a socialiser, you would take care of the puppy or young dog and ensure it attends training classes, is regularly walked, well socialised and of course has lots of hugs!

You will receive support and advice and all costs related to socialisation are paid for by Medical Detection Dogs including food and veterinary care.

**WE NEED  
YOUR HELP**



To find out more please contact: **E** [pam.jones@medicaldetectiondogs.org.uk](mailto:pam.jones@medicaldetectiondogs.org.uk) **T** 01296 711212

# Nothing like a bit of Magic...



Courtesy of Matthew Power photography

**Magic and I have been together since September 2013, and life quite simply has not been the same since! It was a tricky decision to make in having an assistance dog for diabetes, especially when I work as a diabetes nurse for children and teenagers.**



CLAIRE AND MAGIC TALK TO ZOE AT CLINIC

I work at Addenbrooke's Hospital in Cambridge and lead the nursing team who help care for and support nearly 300 children, young people and families with diabetes. I've had diabetes since I was a teenager myself so it can be pretty useful knowing all the tips and tricks. I am used to people popping in to my

office to say hello and ask questions, but since Magic has joined the diabetes team at the hospital I have never been so popular!

Before Magic started to work with me, I wrote to all of my patients, letting them know that there would be a dog in the diabetes clinic, from that day on, whenever people came to clinic they were asking "where is Magic?!" I wasn't really prepared for the effect Magic would have on everyone else. His trainer Lydia had obviously taught him well – how to check out his appearance in a window as we walked by, how to pose for photos, and whenever anyone calls his name, he would turn, turn his head a little, lift up one eyebrow and look like he is saying "yep, that's me!"

He has his own ID badge to let people know who he is, but to be

honest everyone in the hospital knows who Magic is and the amazing job he does. This effect has spread, not just through the children's diabetes clinic but wherever I go in the hospital! I often walk on to the wards and get stopped by people who want to say hello – I often decline as Magic has a very important job to do and shouldn't get distracted, but very occasionally I give in. One day I was visiting a patient of mine on one of the children's wards when a lady stopped me and asked if I could visit her little sister. She had just been transferred from the children's intensive care unit, having spent a week there following a road traffic accident. She had broken her neck and her pelvis and although she could move her arms a little, she was really upset as she was missing



her dogs at home – three Labradors. Magic is still training so I thought it would be a good opportunity for him to practice sitting still and being quiet while I talk to patients so we went to say a quick hello. Let's just say that everyone had a little tear in their eyes before we left. He sat quietly while she managed to reach over to stroke his head and his soft ears. She said thank you and then fell asleep with a smile on her face – the first time in many days.

Magic now has a very important role in the diabetes clinic – welcoming the children and young people and making sure they are listening when we run teaching sessions. He has heard the sessions so many times he now falls asleep quite quickly and can often be heard snoring under the table. Whenever the office gets a little busy or stressed, he will yawn or have wind, stopping whatever is going on and allows everyone to have a little giggle before getting back on with their work.

What is truly amazing is that although he is surrounded by children and young people with diabetes, many of whom come in with low blood glucose levels, he hasn't alerted to anyone else – something I have to put down to his excellent training by Medical Detection Dogs. Many of our



CLAIRE AND MAGIC OFF TO WORK

patients now like to come in and say hello to Magic before saying hello to anyone else – although we don't want this popularity to go to his head! It seems that the magic of Magic has far exceeded anything that anyone had planned – not only does he have a major role in keeping me

safe every day and helps me live my life, he also is helping many of my patients – making the diabetes clinic a happy and welcoming place. I think every clinic should have one – although, there is only one Magic in this world!

*Claire*

“

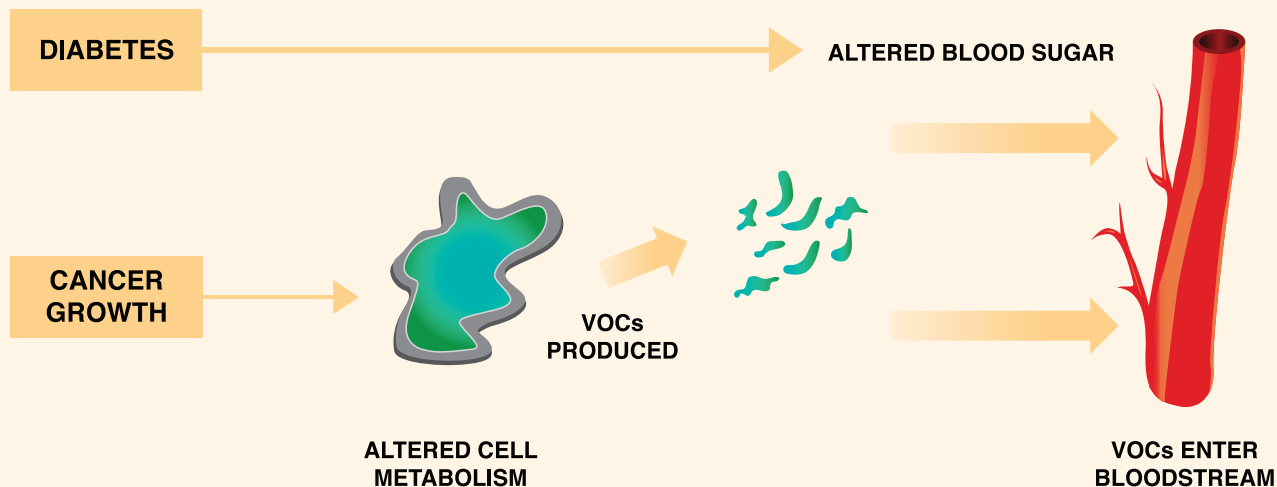
Magic really is my best friend and my soul mate, all wrapped up in a clumsy exterior with his puppy-dog eyes and his grandfather-like eyebrows that say so much! Having him without his alerting would be tonic enough, but to then have his amazing talent on top is both a bonus and privilege.

”



# The Science behind Medical

Dr Claire Guest CEO and Director



**Figure 1:** How dogs use smell to detect disease processes in humans

## How does smell indicate the presence of disease?

- The use of smell as a diagnostic tool is not a new phenomenon: there are many historical examples of diseases being associated with certain odours, such as the presence of gangrene in a wound.
- During the normal processes of the body, metabolic changes occur constantly; however, in cancer development these metabolic processes are altered. Increased oxidative stress leads to the formation of reactive oxygen species and free radicals, these generate volatile organic compounds (VOCs), such as alkanes and alkenes, that diffuse into the bloodstream and are then excreted in the breath or in the urine. [Haik 2014]
  - Some VOCs have been investigated as possible biomarkers for various types of cancers, including lung cancer, breast cancer, and cancers of the head/neck. [Haik 2014]
  - VOCs can also indicate the occurrence of metabolic diseases, such as the presence of ketones in type 1 diabetes.
- Dogs have a vastly superior olfactory apparatus compared to humans.
- This is why dogs are used by the police, armed forces, and civilian agencies to detect people, explosives, drugs and other contraband items.
- Dogs can detect VOCs, and at a concentration of only 0.001 parts per million. [Waggoner 1998]
  - They can be trained to discriminate between the “VOC fingerprints” from healthy versus diseased individuals (Figure 1).
- It should be noted that training a dog to detect the “odour fingerprint” for a particular type of disease among the thousands of odours normally found in a human sample of breath, urine, blood, or faeces without recourse to the “pure source” is extremely challenging. [Willis 2004]

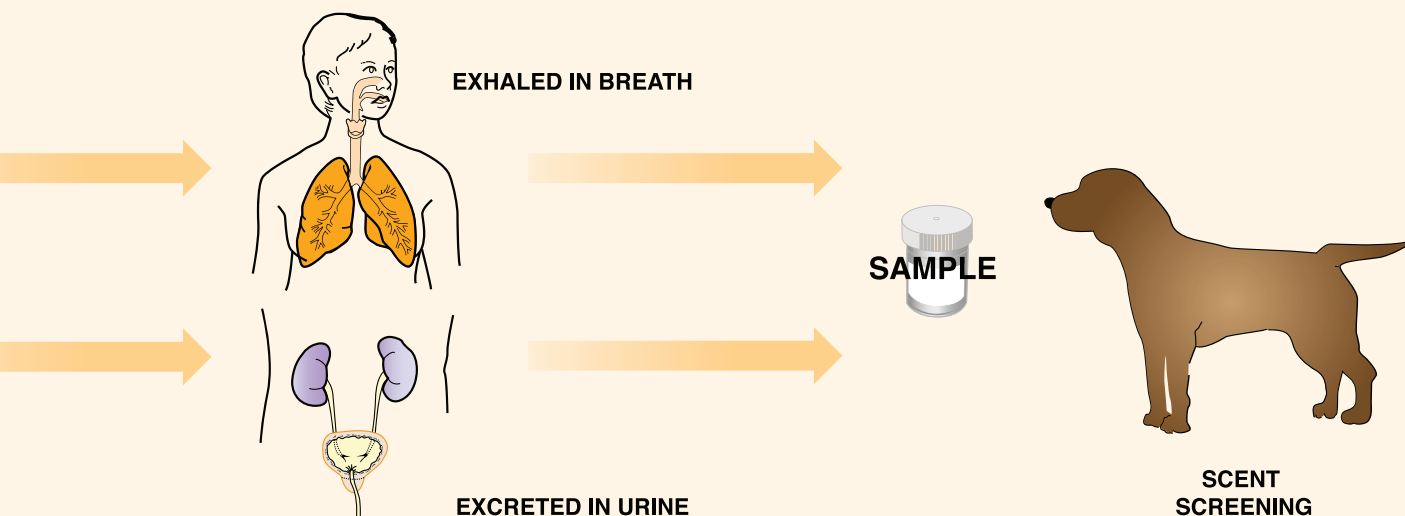
- Background odours may come from food stuffs, drinks, drugs, other medical conditions, tobacco/alcohol use, use of deodorants/perfumes, etc.
- Thus, training a medical-detection dog is more complex than training a dog to detect explosives or drugs.
- Nonetheless, numerous clinical studies have reported the use of dogs to detect the presence of disease over the last decade, including various types of cancer and metabolic diseases, including more recently diabetes.

## How are dogs used to detect cancer?

- Interest in canine cancer detection began around 15 years ago, when a case report described a woman who was eventually diagnosed with malignant melanoma after the family dog showed excessive interest in a lesion on the woman’s leg. [Williams 1989]
- A further case report of canine malignant melanoma detection was published in 2001. [Church 2001]
- The first clinically robust investigation of cancer detection by dogs was reported by Willis and colleagues (2004), in which dogs were trained to detect bladder cancer (transitional cell carcinoma, TCC) by smelling patients’ urine samples. [Willis 2004]
  - This was also the first clinical study involving cancer detection dogs trained by MEDICAL DETECTION DOGS.
  - Subsequent analysis revealed an overall diagnostic accuracy of 41%, whereas the success rate based on chance alone was estimated to be 14%; however, these results were disappointing.
  - They may be explained in part by the fact that the dogs were divided into two groups: one group screened wet urine samples, while the other group used air-dried samples. The latter group’s performance was considerably worse, possibly due to loss of the VOCs important to the “odour fingerprint” of bladder TCC.



# Detection Dogs



Abbreviations: VOCs = volatile organic compounds

VOCs generated during disease processes, such as cancer growth or metabolic disease (e.g. diabetes), enter the bloodstream and are excreted via the breath or in the urine. Samples of breath /urine taken from individuals with cancer or diabetes are then “scent screened” by dogs that are specially trained to detect the “odour fingerprint” for that disease.

- An intriguing finding in this study was that one particular control sample was persistently identified as a cancer case by our cancer detection dog, Tangle\* – the individual concerned had previously had a negative cystoscopy and ultrasonography. The treating consultant was sufficiently concerned by the dogs’ behaviour to test the person again – a transitional cell carcinoma of the right kidney was discovered.

(\*Interestingly, Tangle obtained the highest individual accuracy score of 56%.)

- Further studies using dogs trained to detect a number of other types of cancer were published subsequently – an overview of these studies is presented in **Table 1**.

## Comments on cancer detection study methodologies

- All of these cancer detection studies used household pet dogs and trained them using a “clicker”, usually with a food reward, over periods lasting anything from 3 weeks to 24 months.
- These studies (excluding Willis 2004) were generally successful, with sensitivities of at least 64% and specificities of at least 91%.
  - However, the methodologies used were variable and some studies had limitations in design or data analysis, such as a lack of analysis for confounders (e.g. medication, diet, concomitant disease). [Boedeker 2012]

**Table 1:** Cancer detection using dogs – summary

Tumour type investigated	Reference	Study summary <sup>a</sup> Samples, number of dogs, training method (if trained)	Results summary <sup>b</sup> Sensitivity / specificity (95% CI, if available) or success rate
Lung cancer	McCallough <i>Integr Cancer Ther</i> 2006	Breath samples = 56 Lung cancer / 83 Healthy; 5 dogs; trained via clicker with food rewards	95% (59-100%) / 95% (56-100%)
	Rhodes <i>Eur Resp J</i> 2012	Breath samples = 40 Lung cancer / 50 COPD / 130 Healthy; 4 dogs; trained with food rewards	71% / 93%
Breast cancer	McCallough <i>Integr Cancer Ther</i> 2006	Breath samples = 32 Breast cancer / 53 Healthy; 5 dogs; trained via clicker with food rewards	88% (73-100%) / 95% (50-99%)
Prostate cancer	Cornia <i>Eur Urol</i> 2011	Urine samples = 33 Prostate cancer / 33 Negative biopsy; 1 dog; trained via clicker with food rewards	91% / 91%
Ovarian cancer	Hurvath <i>BMC Cancer</i> 2013	Blood samples = 42 Ovarian cancer / 210 Healthy; 2 dogs	97% (81-99%) / 85% (58-100%)
Bladder cancer	Willis <i>BMJ</i> 2004	Urine samples = 8 Bladder cancer / 54 Controls; 6 dogs; trained via clicker	41% success rate (23-58%) (Data expected due to chance = 13%)
	Willis <i>Cancer Research</i> 2011	Urine samples = Bladder cancer / Controls; 4 dogs	64% (55-73%) / 92% (82-97%) for healthy, young controls vs 56% (42-68%) for older controls with non-malignant urinary disease
Colorectal cancer	Schmidt <i>Gut</i> 2011	Breath = 33 Colorectal cancer / 132 Control <sup>d</sup>	91% / 93% for breath samples
		Faecal samples = 37 Colorectal cancer / 145 Control <sup>d</sup> 1 dog; reward based training	93% / 93% for faecal samples
Melanoma	Pickel <i>Appl Anim Behav Sci</i> 2004	Direct contact with skin = 7 Melanoma / 98 Healthy; 7 dogs	82% / 100%

Abbreviations: CI = confidence interval; COPD = chronic obstructive pulmonary disease

a. Study was prospective and used ordinary household dogs unless otherwise stated.

b. Results are from double-blind testing unless otherwise stated.

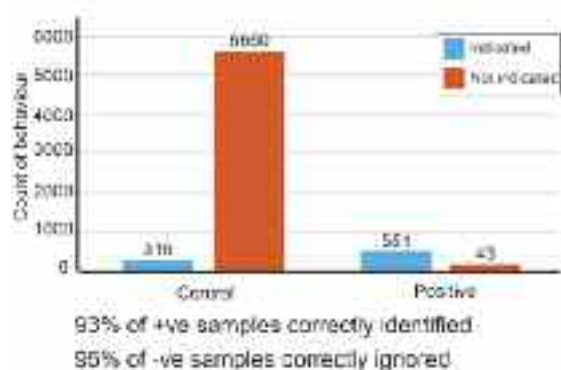
c. Other malignancy (excluding bladder cancer) permitted if currently disease-free, any other current/past medical conditions permitted.

d. Non-malignant gastrointestinal conditions permitted.

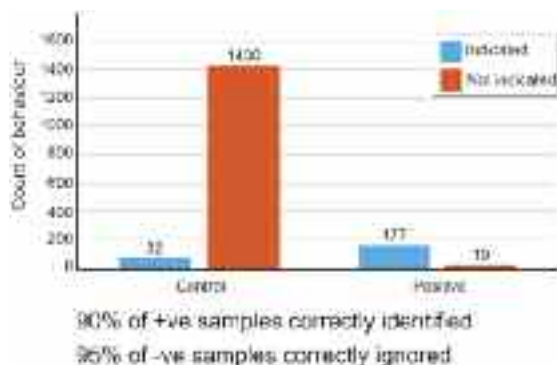
**Figure 2:** Bladder cancer samples screened by Daisy, as trained by MEDICAL DETECTION DOGS



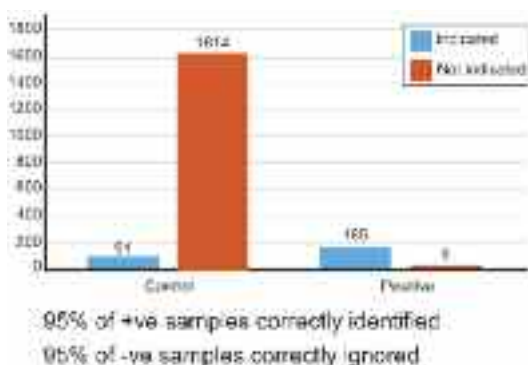
**B All samples screened**



**C Screening of early stage bladder cancer**



**D Screening of advanced stage bladder cancer**



Daisy, a Labrador, is shown at work screening bladder cancer samples by smell (panel A).

(Panels B-D) The overall sensitivity (i.e. sick people correctly diagnosed as sick) and specificity (i.e. healthy people correctly identified as healthy) scores were very high (>90% each); the sensitivity score achieved by Daisy for screening advanced cancers was greater than that for screening early cancers, whereas the specificity score was the same for both groups. A perfect predictor would be described as 100% sensitive (i.e. predicting all people from the sick group as being sick) and 100% specific (i.e. not predicting anyone from the healthy group as being sick).

- Data from recent cancer screening using a dog trained by Medical Detection Dogs is presented in **Figure 2**, and shows that our detection accuracy is high.

### Cancer detection using dogs versus other detection methods

- The results using dogs to detect cancer were equally as successful as those using “electronic nose” devices: [Bijland 2013]
  - A review of six canine cancer detection studies reported a median sensitivity and specificity of 94% and 98%, respectively, versus 75% and 92%, respectively, from seven cancer detection studies using an electronic nose. [Bijland 2013]
- A study comparing dogs versus gas-chromatography mass-spectrometry (GC-MS) to detect lung cancer VOC markers reported a sensitivity and specificity of 82% with dogs (similar data for GC-MS not applicable), and also stated that using dogs was simpler and cheaper than GC-MS. [Buszewski 2012]



SCENT TRAINING CAROUSEL

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# Paws-ing from their work to dig deep for dogs

Kindhearted Roche colleagues launch their 2014 charity fundraising



DR CLAIRE GUEST, CLAIRE WITH MAGIC, PAUL MARSTON FROM ROCHE, ROB HARRIS WITH ULRIC AND AIDEN BRISLAND

## Tails were wagging at Roche as colleagues at the Welwyn Garden City-based pharmaceuticals firm launched their charity fundraising for the year.

In 2014, Roche employees have chosen to support Medical Detection Dogs as their Charity of the Year.

Dr Claire Guest, CEO of Medical Detection Dogs, said that Roche employees' support during the year would be invaluable: "We currently have 48 dogs working in partnerships that support individuals with a variety of conditions. But we have close to another 50 people who want a dog to help them.

"It costs us £11,000 to train a dog to our standards which currently

means it will take us three years to supply everyone on our waiting list. That's a long time to wait for people who have conditions that are life-threatening or severely reduce the quality of their life."

Roche colleagues held a launch event on 29 January, where they got to meet some of the life-saving dogs and find out more about their work. Activities including a prize draw, a smell challenge and a weekly weight loss club have already raised more than £3,000 for the charity.

Aiden Brisland, Roche's Corporate Affairs Lead, said: "Roche colleagues are delighted to be supporting Medical Detection Dogs this year. It is a rapidly growing charity that provides life-saving assistance for people who desperately need help and support to manage a range of serious health conditions."

Over the past decade, Roche employees have raised nearly £250,000 through its Charity of the Year initiative for a number of different organisations.



# Medical Detection Dogs receives £5,000 from the Southern Golden Retriever Society



DUDLEY WITHERS AND JOHN ADAMS PRESENT A CHEQUE TO SHARON AND BRIAN WITH MEDICAL ALERT ASSISTANCE DOG LUCKY



THE SOUTHERN GOLDEN RETRIEVER DISPLAY TEAM

The Southern Golden Retriever Society was delighted when its members agreed at their AGM in March last year that the Society would raise funds for Medical Detection Dogs for the second year running.

Since then the Society, its training branches at Wrotham, Hooley and the Southern Golden Retriever Society Display Team have undertaken a number of fundraising activities

including a sponsored 'down stay' which raised an incredible £1,400 bringing the years fundraising total to over £5,000.

These events have included Medical Detection Dogs presentations to members in Hooley, Surrey and Worthing, West Sussex, by Medical Detection Dogs South East Representative Sharon and her husband Brian accompanied by his Medical Alert Assistance Dog Lucky.

A cheque for £2,000 was presented to Sharon and Brian by Dudley Withers and John Adams at a BBQ held for Hooley members last August.

The Southern Golden Retriever Society will present the rest of their donation at Crufts in the Spring.

*Medical Detection Dogs would like to say a huge thank you to everyone from the Southern Golden Retriever Society for their amazing support.*

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Supporting Medical Detection Dogs

## We need your stamps!



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The face value of the stamp doesn't matter, they are all worth something.

Please send your stamps to the following address:

**Medical Detection Dogs, Used Stamp Appeal,  
Fords Farm, HORSEY, Norfolk NR29 4EP**

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- Find Dog friendly places Close to your location
- Choose from either a colour generation pedigree or a fun family line for your dog
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please visit the Medical Detection Dogs page at:

[www.recycle4charity.co.uk](http://www.recycle4charity.co.uk)



Recycle



Charity.co.uk

# Dogs and diabetes

By Dr Nicola Rooney

**Many of our clients with Medical Alert Assistance Dogs over the last few years very kindly took part in a study conducted by Dr Nicola Rooney at University of Bristol. Nicola wishes to extend her sincere thanks to you all for your time and record keeping which has led to the first ever paper describing the value of trained dogs to be published in the scientific journal PLOS ONE.**

Previous papers have suggested that some pet dogs can respond to their owners' hypoglycaemic state, but in their paper published on Thurs 8th August 2013, Drs Nicola Rooney, Steve Morant and Claire Guest were able to demonstrate that glycaemia alert dogs trained by Medical Detection Dogs and placed with clients living with diabetes afford significant improvements to owner well-being.

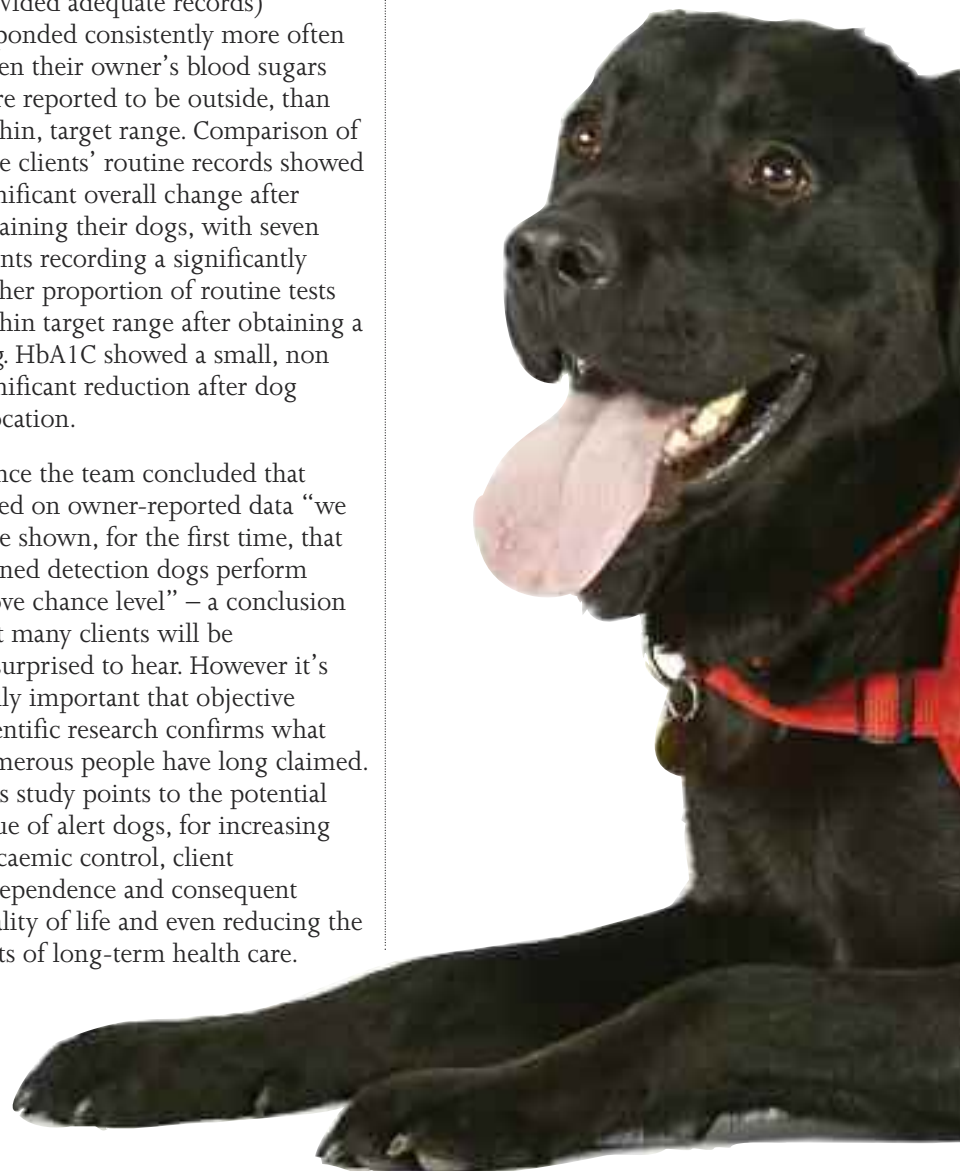
Over many months Nicola collected data for Medical Detection Dogs clients, visiting and interviewing them in their homes, and many clients also provided in-depth records of their dogs performance and their own blood sugar levels both before and after obtaining a trained dog. This allowed the research team to investigate objectively whether trained dogs reliably respond to their owners' hypoglycaemic state, and whether owners experienced tightened glycaemic control, and wider psychosocial benefits.

The paper shows that since obtaining their dog, all seventeen clients studied reported positive effects including reduced paramedic call outs, decreased unconscious episodes and improved independence. Owner-recorded data showed that dogs alerted their

owners, with significant, though variable, accuracy at times of low and high blood sugar. Eight out of the ten dogs (for which owners provided adequate records) responded consistently more often when their owner's blood sugars were reported to be outside, than within, target range. Comparison of nine clients' routine records showed significant overall change after obtaining their dogs, with seven clients recording a significantly higher proportion of routine tests within target range after obtaining a dog. HbA1C showed a small, non significant reduction after dog allocation.

Hence the team concluded that based on owner-reported data "we have shown, for the first time, that trained detection dogs perform above chance level" – a conclusion that many clients will be unsurprised to hear. However it's really important that objective scientific research confirms what numerous people have long claimed. This study points to the potential value of alert dogs, for increasing glycaemic control, client independence and consequent quality of life and even reducing the costs of long-term health care.

The team now hope to extend their work to further understand how dogs carry out this task. They hope to follow clients before and after obtaining a dog, to actually measure dog behaviour, using video recordings and remote glucose monitoring. This will allow them to confirm owner reports, to examine factors that affect working ability and to identify the odour cues to which the dogs are responding, and thereby help improve dog performance in the future.





**Q Did you find that these alert dogs were well-suited to patients with a particular level of diabetes severity, i.e., moderate, moderate to severe, severe?**

**A** There will inevitably be some people whose lifestyle or attitudes are not suited to having a dog and ensuring the dog has a really good quality of life too. However presently the charity Medical Detection Dogs have many more applicants than dogs, and resources mean that waiting lists are very long. Hence they are forced to be extremely selective and to prioritise people who have very severe brittle diabetes and whose lives are extremely compromised by their condition. The clients I visited have all been chosen for their suitability and in general although their conditions were very severe, their quality of life seemed to have been disproportionately high, presumably due to the benefits the dog afforded.

There was some variability in the apparent reliability of the dogs, which I suspect is partly related to differences in the owner's ability to consistently and positively reinforce the behaviour of her dogs. For this reason, the charity places great emphasis on closely monitoring and supporting clients, and hence ongoing research monitoring performance is important.

**Q Which diabetes patients do you think would benefit most from this type of assistance?**

**A** People who have lost the early warning signs of glycaemic change and hence would benefit greatly from a dog alerting them. People who are also open-minded to a new technology, but equally able to commit to looking after and continuing to train the dog in a positive and consistent way. The benefits of an alert dog likely extend beyond improved glycaemic control as needing to walk and care for the dog is likely to provide additional health and psychosocial benefits.

**Q Are there any barriers to widespread adoption?**

**A** Currently limited funding and resources mean that there are many more people on the waiting lists than there are dogs available. Also as I mentioned above there will always be some people who do not like dogs or whose lifestyle is not suited to ensuring the dog's wellbeing.

**Q Are there any plans to perform larger-scale studies in this area of research?**

**A** We very much hope to continue to work in the field. Whilst this was a very valuable start, we only examined clients after dogs were in place. We would now like to conduct a larger randomised trial in which we follow clients pre and post dog allocation to fully measure the effects of having a trained dog. We also intend to carry out remote sampling trials in which we test dog's reliability of detecting the scent associated with hypo and hyperglycaemia, and aim to identify the chemical components which they may be utilising.



Courtesy of Emma Jeffery



# Domino's Team Refurbishes Centre



THE TEAM FROM DOMINO'S MEET THE DOGS

Staff from Domino's Pizza's head office in Milton Keynes visited Medical Detection Dogs in Great Horwood to volunteer their services to refurbish the charity's building.

Medical Detection Dogs called on the help of Domino's, to paint and makeover their headquarters. It was in need of a spruce up and the Domino's DIY team were the ideal candidates for the job. With some forward planning and inspiration the Domino's volunteers performed a changing room style makeover to the building.

Dr. Claire Guest, CEO for Medical Detection Dogs, said: "We were thrilled that staff from Domino's volunteered their time to help us. We are always looking for keen volunteers to get involved in our charity and we hope this new relationship with Domino's will become a long term one."

Angie Lawrence, CSR Manager, for Domino's said: "As a company we encourage all our team members to volunteer a day to work with a local charity. Every year, several local charities benefit from our staff visiting them to help them with a range of different projects. I was invited along to meet with Claire and the team at Medical Detection Dogs and when they mentioned their office was in need of a lick of paint, I knew I would be able to find some willing volunteers to do the job. As a brand we are passionate about being part of the local community and being able to make a difference."

At lunch time the teams from Medical Detection Dogs and Domino's were treated to fabulous pizzas and salads from Domino's in Milton Keynes, and after

all the hard work these were really appreciated. Claire Guest gave a talk about the charity and showed a video explaining how a trained medical dog can make such a difference to someone's life. The team had a great day and really enjoyed helping out this worthy charity.

To complete this wonderful partnership Domino's Pizza have donated money to name a puppy called "Domino".



DOMINO IS A MEDICAL ALERT ASSISTANCE DOG IN TRAINING

# What's Sniffing?

Jan Shillum's latest news on the nose...

## On the Wild Side

In the U.S.A. they are now training wild life detector dogs to sniff out smuggled animal parts that may be worth a great deal of money to those who use them medicinally, but that threaten the very existence of our planet's endangered species when they are taken illegally, usually killing the animal in the process.

Four new graduates, trained by the US Fish and Wildlife Service: Viper, Butter, Lancer and Locket will make life harder for wildlife smugglers in future after their 13-week long course. The programme teaches dogs to detect the smells of things like elephant ivory and rhino horn and operates at ports, airports and even FedEx and UPS depots.



"Recent rapid growth in illegal global trade of protected wildlife is pushing some species perilously close to extinction. Elephants and rhino populations in particular are

declining at alarming rates," Fish and Wildlife Service Officer of Law Enforcement, Deputy Chief Ed Grace reports. "The battle to stop wildlife smuggling is one we simply cannot afford to lose and using dogs and their phenomenal sense of smell to catch smugglers will give us a real leg up in this effort." Keep up the great work guys; we're hoping something similar is also happening in the UK but if not maybe Medical Detection Dogs will need to come to the rescue once again.

*Source: Treehugger website*

## Rats in a Trap

News from a company called Express Drain Solutions. They have a secret weapon that is making them popular with Londoners who have a rodent problem. Canine employee Ginny is a trained Jack Russell with a 100 per cent success rate in finding rodent entry points within a property.



With local councils cutting pest control budgets by some 30 per cent and national statistics suggesting

that Britain's rat population has risen by over 40 per cent in the last 10 years could this kind of training be another brilliant income opportunity for Medical Detection Dogs?

## Working for Peanuts



YASMINE AND MEDICAL ALERT ASSISTANCE DOG NANO

The latest brilliant development from Medical Detection Dogs is possibly a world first. Yasmine Tornbald from Malvern has had her life changed by Nano, a four-year-old poodle trained by Medical Detection Dogs to detect nut odour traces in both food and the environment. "He's given me my independence back", says Yasmine, who suffers from a severe nut allergy and can go into anaphylactic shock from even the smell of nuts. She now takes Nano everywhere, even on business trips, explaining "Normally when I stay at a hotel I start by cleaning out the room to be sure that there is no contamination — now I have Nano to double check, I can't imagine life without him."

Yet another imaginative use for those clever noses what could be next we wonder — suggestions on a postcard please!



# Ember meets her namers



MEDICAL ALERT ASSISTANCE DOG IN TRAINING EMBER

On what should have been an ordinary Sunday afternoon in Woburn Sands Co-Op there was a bit of a commotion at the checkouts.

This was in no small part due to a very special visitor who had just arrived to meet the members of staff and customers who had worked so hard to raise money for Medical Detection Dogs and more importantly, to choose a name for one of their newest four-legged recruits!

There was no shortage of cuddles and licks as Ember lapped up the attention and even posed for a few photos with some of the staff members responsible for the fundraising. By this point, we were drawing quite a crowd with passing



customers stopping for a look and a chat about the charity. Ember, loving every minute, was a very good girl and sat patiently with her tail wagging.

As we left the store with Ember, there were already plans being hatched for a return visit and plans from the staff to continue fund raising to name another Medical Detection Dog.

## Whizz

### Medical Alert Assistance Dog in training

Whizz is a 21 month old yellow Labrador and a recent addition to Medical Detection Dogs. She already has shown what a good nose she has for sniffing out abandoned tennis balls buried in long grass or hidden under hedges, whilst we patiently wait!

She is very well behaved at home, she doesn't chew, she goes to her bed when asked and waits nicely for her food. But nothing compares with her enthusiasm to greet visitors and often gets herself into trouble in the process. She is learning to sit and wait; she resembles an athlete in the starting blocks.

Whizz has a lovely nature, will roll on the floor legs in the air, toss her toys to us when she wants to play then systematically removes them from their storage box last thing at night when

everyone is on their way to bed. Needless to say a loud 'bedtime' reminds her it's time to climb the stairs where, within seconds, she can be seen sprawled out, filling her bed and snoring for Britain.

She has been to Aylesbury on the bus, visited numerous shops and garden centres, met lots of people, enjoyed eating the crumbs off the floor in the coffee shop, travelled miles in the car, all of which she has taken in her stride.

Her next challenge is fundraising. She will, I'm sure, enjoy all the fuss, but being in one spot for a period of time will challenge her. However, with a pocket full of her favourite treats, she'll be just fine.



By Lynne (Volunteer Socialiser)

# Medical Detection Dogs teams up with Will - Writing Service **The Goodwill Partnership**



The Will-writing service will allow Medical Detection Dogs to generate further legacy donations as well as offer its support-base low cost solicitor-written Wills.

The Goodwill Partnership offer home-visit, solicitor-written Wills. This makes the process of making a Will easy, in the privacy of your own home, and at a time to suit you. This allows individuals to leave a legacy to Medical Detection Dogs if they so desire.

The partnership with Medical Detection Dogs is the latest of a number of recent alliances by The Goodwill Partnership. These have included The National Autistic Society, Motability, World Cancer Research Fund UK, Action for Children, Care for the Wild and Macmillan Cancer Support.

Mark Jackson, Director of The Goodwill Partnership, says: "As a dog-owner myself, Medical Detection Dogs is one of the most inspiring charities I have ever come across. Not only is the charity helping researchers develop non-invasive tests for cancer, but their specially trained Medical Alert Assistance Dogs can warn individuals of oncoming life threatening events. We are thrilled to be assisting such an innovative and pioneering charity."

**The future of Medical Detection Dogs relies on legacies.  
If you would like to write your Will in the privacy of your own home  
please contact**

**The Goodwill Partnership on 0844 669 6148  
or visit [www.thegoodwillpartnership.co.uk](http://www.thegoodwillpartnership.co.uk)**



# Team Update

We have had a busy and very successful 12 months in the Medical Alert Assistance Dog Team and have great pleasure in confirming we now have 47 partnerships placed, 14 of which are in training. Well done everyone involved in this fantastic achievement.

We continue to receive many applications from both children and adults suffering from life threatening and debilitating conditions, who face such difficult situations on a daily basis and hope that a Medical Alert Assistance Dog will have a huge positive impact on their lives, not only from a health perspective, but also in increasing their independence and confidence.

The majority of applications are from people suffering from brittle Type 1 Diabetes, however we are now also receiving more applications from people with heart conditions, where they can suffer from collapsing with no warning signs and also from applicants suffering from severe nut allergies. We are currently very busy matching dogs to clients at the moment and have also commenced running applicant handling days prior to the client's placement with their dog, which are proving to be really helpful and very successful.

I am pleased to confirm that we accredited 10 partnerships within the last year. Congratulations to the following partnerships on successfully achieving fully fledged Medical Alert Assistance Dog status:

**Myrtle** partnered with **Jacqueline**

**Rye** partnered with **Paul**

**Friday** partnered with **David**

**Lucky** partnered with **Brian**

**Milly** partnered with **Yvonne**

**Pal** partnered with **Claire**

**Dotty** partnered with **Rebecca**

**Nano** partnered with **Yasmine**

**Treacle** partnered with **Moir**

These partnerships are doing fantastically well and the clients should be incredibly proud of both themselves and their dogs, it is a great achievement and we wish them every happiness for the future.

*Símon* Client Support Manager



MOIRA AND TREACLE



MILLY AND YVONNE



JACQUELINE AND MYRTLE



CLAIRE AND PAL



PAUL AND RYE



BRIAN AND LUCKY



YASMINE AND NANO





# Cross-country Endurance Race

## 10km or 5k course Sunday 19th October 2014

Dr Claire Guest, Chief Executive would like to see over 100 runners in red Medical Detection Dogs t-shirts at the Swanbourne Endeavour on October 19th. Come and join the Medical Detection Dogs team to raise funds for our amazing work. Claire will be running in the 5K with other staff members of the charity so PLEASE come and join her on this gruelling run. You can donate via the Medical Detection Dogs Just Giving Page.



The Swanbourne Endeavour – October 19th is a gutsy, gruelling off-road endurance event that allows you to plunge into the wilds of Buckinghamshire – streams, woods, fields, haystacks, fire – for a cross-country endurance race that will push you to the limit and beyond. A test of determination spirit and camaraderie, but above all SPIRIT. Spirit is everything.

Brace yourselves for a challenge that will put fire in your belly, a smile on your face – and cover you

in mud. A challenge that promises pain, sweat, tears and, we must stress again, mud. Not just any mud either, but some of the finest slippery, sticky, foot-sucking clay in all England.

If you take up the challenge, your efforts will drum up funds for Medical Detection Dogs.

Swanbourne lies in beautiful countryside between the towns of

Aylesbury, Milton Keynes and Buckingham, making the event very accessible. The village dates back to Norman times and boasts a historic church, two schools, a shop and an award-winning pub, The Betsey Wynne – perfect for sweaty, mud-caked competitors to refuel after the race.

The 5km, 10km & Kids events on October 19th will start and finish in the grounds of Swanbourne House School.

### Race Location

The Swanbourne Endeavour – 5km, 10km & Kids

Swanbourne House School,  
Swanbourne,  
Milton Keynes,  
Buckinghamshire,  
MK17 0HZ

**For more information and to book your place visit**  
**[www.theswanbourneendeavour.co.uk](http://www.theswanbourneendeavour.co.uk)**

### The Swanbourne Endeavour 10km

Sunday 19th October  
11am start.

The 10km will be a punishing, action-packed course suitable for endurance race veterans or competitors who are suitably fit. Hills, woods, streams, hedges, hummocks and hay bales will all be thrown into the mix.

£45 per runner

### The Swanbourne Endeavour 5km

Sunday 19th October  
11.30am start.

The 5km will have similar terrain as the 10km but be achievable to a wider cross-section of entrants – make no mistake, though, it is still no picnic. Indeed, the 5km is predicted to take even the fastest competitors well over an hour.

£35 per runner

### The Swanbourne Kids Endeavour

Sunday 19th October  
10:50am start.

The Kids Endeavour (approx. 4km) will have similar terrain as the 5km but be achievable to a wider cross-section of younger entrants.

More fun than Geography homework!

Kids event - £17 per runner

# Are YOU up for a challenge?

Why not support Medical Detection Dogs and take part in one or more fantastic charity challenge events across the country (and Lapland!) ...

## Lapland Husky Trail For more information visit [www.globaladventurechallenges.com](http://www.globaladventurechallenges.com)

Ever dreamt of driving your own team of spirited huskies across the Arctic, with civilisation left far behind? Well, now that dream can become a reality!

Raise funds for Medical Detection Dogs and take part in this, the most unique of charity events, spending six days sledding through the Arctic wilderness of Lapland for an experience you will never forget. Our charity challenge is to sled 250km from Tromso in Norway, into Sweden through untouched nature, in order to finish at the world famous Ice Hotel in Jukkasjarvi!



The stunning Peak District more than lives up to its reputation as one of Britain's most inspiring National Parks.

**TrekFest - The Peaks 2014 - 27 Mile**  
Saturday, 06 September 2014 - Sunday, 07 September 2014

**TrekFest - The Peaks 2014 - 54 Mile**  
Saturday, 06 September 2014 - Sunday, 07 September 2014

For more information visit [www.trekfest.org.uk](http://www.trekfest.org.uk)



13-14 September 2014

The Thames Path National Trail is unique; varied & beautiful scenery, steeped in history - and a superb backdrop for an exceptional 'festival' of endurance challenges.

Back for its 3rd year - you can take it on as a walk or run, in aid of Medical Detection Dogs.

- 100 km - Putney Bridge to Henley. A 24 hour Walk or Ultra-Marathon run
- 50 km - Options to suit all! 2 daytime Walks or Ultra Runs, AND a 'Moonlight' walk!
- 25 km - Thames Path 25 km. 4 Walk options, 2 Run options - or Jog it!

For more information visit [www.thamespathchallenge.com](http://www.thamespathchallenge.com)



7 September 2014

The London to Brighton 54 mile Cycle Ride is a fundraising challenge starting in South London and finishing on the Brighton sea front.

Thousands of people are expected to take part raising funds for hundreds of different charities and now this is your chance to join them and help raise funds for Medical Detection Dogs. Take part in this classic cycling challenge and go as fast or slow as you like.

Medical Detection Dogs have secured a limited number of places on this London to Brighton Bike Ride. There is a £35.00 registration fee to take part and we ask our supporters to try and raise a minimum sponsorship of £200.

To book your place for this event please contact [claire.akehurst@medicaldetectiondogs.org.uk](mailto:claire.akehurst@medicaldetectiondogs.org.uk)

For more information visit [www.doitforcharity.com](http://www.doitforcharity.com)



Cross-country Endurance Race  
10km or 5k course

Sunday 19th October 2014

The 10km will be a punishing, action-packed course suitable for endurance race veterans or competitors who are suitably fit. Hills, woods, streams, hedges, hummocks and hay bales will all be thrown into the mix.

The 5km will have similar terrain as the 10km but be achievable to a wider cross-section of entrants - make no mistake, though, it is still no picnic. Indeed, the 5km is predicted to take even the fastest competitors well over an hour.

For more information visit [www.theswanbourneendeavour.co.uk](http://www.theswanbourneendeavour.co.uk)



**MOONRIDERS**  
EXPERIENCE CYCLING IN A NEW LIGHT

Halloween Friday 31 October 2014

Setting out under the cover of darkness from 8.00 pm onward - on an escape from Dracula's lair. Demonic mechanics will tend to your bikes and the walking dead will serve up refreshments to send you on your way before being let loose on the streets of London.

For more information visit [www.moonriders.co.uk](http://www.moonriders.co.uk)

For further information about challenge events please email Rachel: [challengeevents@medicaldetectiondogs.org.uk](mailto:challengeevents@medicaldetectiondogs.org.uk)

# Rachel signs up for Trekfest

Rachel Rice and her company Veho Solutions have recently come on board as a corporate supporter of Medical Detection Dogs and have signed up to take part in the challenging 'Trekfest – The Peaks' event to raise money for us in 2014.

Rachel set up her hugely successful and well renowned professional driver services business in 2005 and now counts brands such as BMW, Mercedes, Rolls-Royce, Audi and Nissan as clients. She also provides services to international events such as the London 2012 Olympics, the ATP Championships and later this year, the 2014 Ryder Cup.

Rachel has recently re-launched her company (which was previously known as Rachel Bowen Associates) following her New Years Eve marriage and the desire to create a new, strong brand for her business moving forward. During the period of re-launch, Rachel decided that it was important for her business and her team to take on an official charity. She wanted to give something back to the community and find an opportunity to bring her team together with a joint cause.



Rachel's decision to choose Medical Detection Dogs as Veho's official charity stems from a personal family connection to cancer with both breast and ovarian cancer in her close family. Members of Rachel's family were also some of the first to experience genetic testing for the BRCA gene. Rachel's tests thankfully came back negative, but it is something that has stayed with her and she wanted in some way to give back. She is also a passionate dog owner and Monty, her black Labrador, travels with her to many of the Veho events. Monty is very much part of Rachel's family and has given her a

greater understanding of how a Medical Alert Assistance Dog can bring amazing support and security to families.

Veho's launch event recently took place at the prestigious Pennyhill Park Hotel in Bagshot where Sharon Lynn, South East Regional Coordinator, her husband Brian and their dog Lucky were invited to speak to clients and associates. During the event, Rachel announced Veho's commitment to supporting the charity and has pledged to raise £5000 for Medical Detection Dogs by the end of 2014.

Rachel and her new husband Paul, as well as their boys, Tom, Andy and Thomas (who are all involved in Veho) have all signed up to take part in 'Trekfest – The Peaks' for Medical Detection Dogs. On the night, guests were invited to sign up to join the team to trek or to sponsor them on their challenge. Around £750 was pledged on the night and several guests took the plunge and signed up to take part in the trek. 'Trekfest – the Peaks', taking place in September, is a daunting 27-mile trek over 12 hours through the hills and valleys of the beautiful Peak District.



## Commission a portrait of your dog and help Medical Detection Dogs

Bridget Wood has drawn this portrait of Cancer Detection Dog, Daisy. Bridget bred Daisy who is owned and trained by Dr Claire Guest.

Amongst Bridget's commissions have been for the Queen and the Duke of Edinburgh, the Duke and Duchess of Westminster, and the Rt. Hon Iain and Mrs. Duncan Smith.

Having worked in the past on "Survival", Anglia TV's wildlife documentary programmes and been a photographer of weddings, children & newborn babies at the Portland and St. Mary's Lindo Wing, Bridget now has more time to concentrate on her pastel drawing in her small studio in Kent.

Bridget is very kindly giving half her profit to Medical Detection Dogs for any commissions. Email: [bridgetwood2011@gmail.com](mailto:bridgetwood2011@gmail.com)



# Please sponsor our puppies

By sponsoring our puppies and young dogs you can make a real difference by helping to support their care and training which enables them to change and save lives.



For further information please contact Claire Akehurst

E: [claire.akehurst@medicaldetectiondogs.org.uk](mailto:claire.akehurst@medicaldetectiondogs.org.uk) T: 01243 839306

