The purpose of this article and accompanying discussion is to share some of my own experiences with happiness and positivity, look at the evidence-based science that shows the benefits of positivity in the workplace and in our personal lives, and then offer some research based strategies that have worked for thousands, including me. While we enjoy this cruise it is an opportune time for reflection. Modern life has created a hectic treadmill where the demands of commerce and technology have torn us mercilessly in many directions. Everyone wants to be happy yet excessive, destructive stress is prevalent for many members of our profession. I believe the pursuit of happiness and positivity is important for many reasons. In no particular order here are a few:

- Clients gravitate to a pleasant environment people want to do business with happy, positive people
- 2. A positive business environment is conducive to higher profitability, higher client satisfaction and greater team productivity and performance
- 3. Happiness and positivity are clearly linked to physical, mental and emotional health and any efforts to improve this for ourselves and our loved ones is an effort well-spent
- 4. The evidence –based strategies for developing positivity work not only to help someone who is languishing lift themselves from depression and negativity, but also to help someone who is already doing well do even better and flourish.
- 5. Happiness and positivity are contagious to the point that we can become an 'epi-center' of positivity, radiating and infecting those around us, creating a ripple effect to help make the world a better place

My vet school visits to nursing homes with dogs back in 1980 were heartwarming and humbling. The most memorable thing for me was a woman who was bed-ridden and seemed catatonic to me. My dog started nuzzling her hand and she started moving and talking, even though incoherently. Her caregiver was brought to tears as she said the woman hadn't moved for weeks. Two things dawned on me later. First that it was better to give than to be selfish, but more importantly it was then I realized we weren't just in the business of animal health but we were in the business of **happiness**. If we could keep animals healthy so they could bring this much joy to people then what we did was exceedingly important.

I used this new found knowledge to support me in vet school. I knew I would graduate because I had a higher calling, to keep animals healthy so they could help make people happy. What could be more important than helping people be happy?

As a young veterinarian and business owner I became intrigued with happiness and positivity because I noted that business success seemed to be intricately linked with happiness. The

positive owners I met were more likely to have successful businesses and they had cheerful team members. The ones who were negative or sour just didn't seem to be as successful, plus they seemed miserable. I took a Dale Carnegy course, then helped teach it, and read positive motivational literature by authors like Norman Vincent Peale, Napolean Hill, Dale Carnegie – How to Win Friends and Influence People, The Amazing Results of Positive Thinking, Think and Grow Rich. And the results were pretty good. Diane and I had 3 veterinary clinics by the time we were 27 and by most measures were pretty successful. In hindsight our clinics exuded positivity and attracted positive employees and clients.

Fast forward 25 years and I became so consumed by life, family, practice and veterinary association work that I forgot all the positivity I had learned and the success it had helped create. Eventually I became burned out and retired from active practice. It turns out I was not alone. Surveys in our profession report very high levels of stress. The suicide rate for veterinarians is 4-7 times that of the general population. In a large Harvard study people reported being unhappy 47% of the time.

For the past 6 years I have been a consultant relying on my business skills to help clients. Perhaps it was because of the experience I had been through, but I found I was spending more time helping the owners deal with their unhappiness than their business. During this time I have studied positive psychology, how to work on one's happiness and how to cope with stress. Seeking more tools, I became a certified life coach and attended a number of courses on stress reduction through mindfulness. In my studies I uncovered lots of work showing how deliberate efforts to improve positivity created happiness, but also improved business success.

Whereas the early positive thinking that I had read about in the 80's was anecdotal and opinion-based, the new positive psychology and business literature was rigorously evidence based. There are many people in veterinary medicine talking about how stressed we are, but very few talking about what we can do about it. There is plenty of work on positivity in the workplace but few are talking about how critical this is to the success of a veterinary team.

Harvard researcher Shawn Achor describes research about the relationship between positivity and success. A team of researchers studied 60 business teams for several years. Research assistants were trained to code every single statement made during business meetings as to whether they were positive or negative. Positive statements (P) tended to be more uplifting, other-focused and based on inquiry whereas negative statements (N) were deflating, self-focused and self-advocating. It was determined the high-performing successful teams had significantly higher P/N ratios vs those low performance teams.

In one specific example, a mining company was losing 10% per year and the ratio was 1.15:1 The researchers trained the executives to increase their praise and positive comments. The

company profits improved by over 40% when the ratio increased to 3.56:1. It was shown there was a direct correlation between positivity and current and future business success in not only this company but many others. Companies with low ratios also had very few resources to cope with adversity. One major business hurdle like an economic turndown, a new competitor or loss of a key client may be all it would take to topple these companies with low positivity.

Studies show positive teams make higher sales, have better customer satisfaction and perform better on 360 degree reviews. Negotiators are more successful when trained to be positive. It's not all that surprising when you think of it. Subsequently it has been shown in studies at numerous business schools that positivity fuels creativity, energy, motivation, resiliency, engagement and productivity, all precursors to success. Efforts of management to foster positivity using techniques such as Appreciative Inquiry are successful not only in team-building but financially as well.

University of North Carolina positive psychologist Barb Fredrickson has studied positivity extensively for almost 20 years. She defined, quantified and has been able to create in the laboratory 10 positive states, namely: joy, gratitude, serenity, hope, interest, pride, amusement, inspiration, awe, and love. She is renowned for her 'broaden and build' theory which proves that positivity **broadens** ones mental, psychological, physical and social resources and that positivity enables one to create/**build** a better future life.

She sought to determine the relationship between positivity and negativity and whether a higher P/N would separate those who are truly flourishing from those who are merely existing (languishing)? First she conducted a survey with participants to determine their baseline psychological state. Next, over a period of several months she tallied the ratio between the number of positive and negative emotions participants experienced each day. She found a similar phenomenon to that of the successful companies. In order to flourish emotionally, one must experience at least 3 times as many positive emotions as negative. She then worked with those participants with scores lower than 3:1 to increase their positivity using a number of tools described below and was successful in doing so. Other researchers have duplicated these results and provided additional information regarding the relationship between positivity and mental well-being.

Positivity and happiness are terms that are often used interchangeably. What is happiness? Wikipedia calls it a state of positive well-being ranging from contentment to intense joy. According to University of California psychologist Sonja Lyubomirsky, author of "The How of Happiness", about 50% of our happiness is genetically predetermined, 10% is due to current circumstances and about 40% by intentional activities. Some of us are genetically preprogrammed to have higher dopamine and serotonin levels than others and therefore be more positive than others. There is nothing we can do about this 50% genetic set point.

The next portion of our happiness is the 10% of our happiness related to our current circumstances. I find this work fascinating. As one might imagine it's easier to be happy while on this cruise than while un-plugging the toilet. But all the studies have shown that happiness OR unhappiness, related to circumstances, is temporary. The most telling study as described by Harvard psychologist Dan Gilbert compared mega-lottery winners with acute paraplegics. While understandably there was a large increase in the happiness of the lottery winners and a large decrease in the happiness of the paraplegics, within 6 months each group settled back to their original genetic set point of happiness. In other words, adversity or good fortune had no lasting effect! Other studies have shown that age, health, education, geography, sex and many other variables have no lasting effect on happiness. To say, I'll be happy when, I get that job, if I was more beautiful, younger, more intelligent or lived in a better climate, is only true temporarily – one will revert back to the basic level of happiness. That's why people fall madly in love only to separate a few months later. A change in circumstance will only buy a few months happiness at best. One study showed that the thrill obtained from buying something may only last for as little as 11 minutes. This can be seen perfectly at holiday resorts, or on this cruise. In the beginning people are delighted to be there and to be waited on and have delicious food and beverages...... but within a few days we see righteous indignation while waiting a few extra seconds for a beer, or IMAGINE forgetting our dessert fork, or the maid did not leave a mint on the pillow!

To recap 50 % of our happiness is predetermined genetically and 10% is circumstantial. This leaves 40% that we CAN do something about . We CAN intentionally increase our happiness, by using the large number of evidence-based tools that have been proven to improve happiness and positivity, help people to feel fulfilled and improve well-being . We can change how our brain works and new findings in neuroscience substantiate this.

NEUROSCIENCE: it is very well evidenced now that our nervous system is plastic and the term neuroplasticity is recognizable. It used to be thought that once we reached adolescence our intelligence and reasoning abilities were cast in stone; we could only look forward to diminishing capacity with aging. This is not true. This is the very reason why brain training companies like Luminosity exist. Extensive research has shown that we absolutely can modify our nervous system, our thought processes, and subsequently our feelings and emotions.

If one considers that when we multiply the number of neurons times the number of synapses and interneuronal microtubules there are 10×27^{th} possible interneuronal connections. That's more than the 10×23^{rd} stars that Google estimates are in the universe. There are so many possible firing sequences and each time we learn a new thing and habitualize it , be it piano or a surgery technique or learning to appreciate things more often, new neural pathways are being

created that can be documented by fMRI. My analogy is this is like creating a new trail through deep snow. Each time we pass through this trail the path becomes easier to traverse.

It is now known we can and do grow new brain cells. Just as we replace skin and blood cells, there are neural stem cells in the hippocampus and lateral ventricles that differentiate into neurons as required. Essentially we replace all the cells in our body every 3 months so that we become a 'new person'! Some people have hypothesized as we retrain the brain we are essentially training new cells?

We can train new pathways for our emotions just as we can for motor skills. Functional magnetic resonance imaging/fMRI shows different areas of the brain lighting up after training. The best example of this is the Stanford Tibetan monk study where monks laid in MRI machines and meditated on loving kindness. They had 4 standard deviations greater left pre-frontal cortex activity than is normal or average, suggesting that thinking about love and compassion will forge a new neural pathway. It is said in neuroscience, 'neurons that fire together, wire together'.

It is now known that happiness activates the vagus nerve which controls and calms heart rate and respiration ie improves 'vagal tone'. Vagal activation triggers the secretion of oxytocin, the 'bonding hormone' which creates warm feelings of attachment and inclusiveness. Oxytocin dampens the amygdala, the trip switch that enables our brain to flip from cool logical thinking into panicked flight and fright and as a result cortisol production is reduced. A happy person, one with a strong positivity ratio, has better health, is calmer and is able to think more clearly.

Neuroscience says and researchers have proven that positivity and happiness can become a habit. Because we have developed and worked on them, we have created new neural pathways to support them, and the benefits to us are greater contentment, better health and greater success in our life and business.

In order to work on the 40% of our happiness we have under our control, there are tools. These tools can be used to increase the positivity ratio, to tip towards and over that 3:1 barrier and to lift us past our genetic set point and circumstances into that area where WE are controlling our own destinies, WE are controlling our mind and WE are choosing positivity, happiness and success. When we do this we improve our emotions, our health, our minds and our businesses. These tools work, as simple as they are, because our minds are plastic and we can change them.

Here is a little reminder of what we already know: "Feelings 101 – in order to have a feeling or emotion, it must be preceded by a thought – a good thought will create a good feeling, a bad thought will create a bad feeling – these thoughts can be real or imaginary, conscious of subconscious, but the feelings that result are very real. In order to change your feelings, you must change the thought".

TOOLS:

1.Gratitude has been shown to increase positivity. I think that is one of the reasons why we felt so good visiting the seniors. Clearly they were grateful to us. There are 2 gratitude exercises that have been studied extensively and work well.

Martin Seligman, the founder of positive psychology describes the 'gratitude visit': write a 300 word letter thanking someone who has been influential in your life, specifying what they did to influence you and why it was important. Meet with this person, and read the letter to them in person. There will probably be tears. Not only will you feel better but they will too and the effects of this single exercise can last months because gratitude expressed is a powerful catalyst to happiness. Take a moment to think about an influential person in your life that you may like to thank. Can you write down a name or 2? How did they affect you? What was the result? What would it take to conduct a gratitude visit to this person? How might you both benefit? What is stopping you?

Also in this category is the Gratitude Journal, also called Three Blessings. It is most beneficial to keep journals on our nightstand because what we write before we sleep will go into our subconscious mind more effectively. Write down 3 things for which you are grateful. It can be as simple as your comfortable bed, good health, the ice cream you ate or something deeper, like a nice thing someone said or did at work today or the safe return of a group of hostages. To maintain this journal for at least 30 days will cause positivity and happiness to increase significantly over that of control groups. Some people have found that maintaining this daily becomes boring for much longer than 30 days although this has not been the case for me. A suggestion for this is after a couple of weeks perhaps start entering their 'gratitudes' every other day or perhaps every third day. Regardless it is scientifically proven that honing our recollection of things to be grateful for will sharpen our mind to look for other things to be grateful for. Gratitude is a very powerful form of positivity and to seek it out is very effective. Here's why:

Tetris Effect: Have you ever played a video game for so long that the pattern in the game was all you could see? Of course psychologists have studied this effect called 'cognitive afterimage'. They did this with the addictive video game Tetris where the goal is to fill all the gaps with tiles. Participants played as much as they could non-stop for 3 days; afterwards all they could see were patterns with gaps and would search for something to fill the gap, like looking at a city skyline, and moving a skyscraper to fill the gap between 2 buildings. Harvard psychologist Shawn Achor describes this as the 'Tetris Effect'. Now imagine you are in a profession that constantly scans for errors/mistakes/loopholes, like a tax accountant, a lawyer or a medical person scanning for abnormalities. This constant scanning for WHAT IS WRONG, makes it very hard to see WHAT IS RIGHT! In fact, this behaviour can spill into their everyday life so they are

spending their time looking for what is wrong with their spouse, their kids, their life; it's no wonder these professions have high levels of depression, lawyers at 4 times the rate of the general population. They have high levels of pessimism where they are more apt to see things as permanent, pervasive and beyond their control. The very same traits that make them good lawyers or doctors can make them prone to depression. Achor calls this the negative Tetris effect. This is exactly WHY exercises like gratitude journals can be effective to retrain the brain to look for what is Right, what is Good, correcting the negative Tetris Effect and trying to create a positive Tetris effect.

- 2.POSITIVE EVENTS JOURNAL/WHAT WENT WELL and WHY (W4) This is another strategy to retrain the brain to scan for the positive events that have happened. On those days when not writing about 3 things for which one could be grateful, try writing about something that went well today and **why** it went well. This takes a bit more work and can be quite fulfilling. The extra thought to determine **why** things went well bolsters positivity significantly. According to the research the positive effects of maintaining a Positive Events Journal for 30 days can last for months.
- 3. KINDNESS Studies show that intentionally boosting our kindness will increase our positivity. Everyone has likely heard about random acts of kindness where gestures such as paying for another's highway toll, or cup of coffee makes both the giver and receiver feel good. Studies have shown exactly this. What is wonderful is that it has now been proven by research that kindness is a sure-fire positivity booster. Kindness is a self-fulfilling prophecy because as we think about what nice, kind thing we may do next for someone, we are actually performing a kindness on yourself, scanning for a good thing, a kind of Positive Tetris Effect, increasing your own positivity. When you perform a kindness, your levels of oxytocin and progesterone, the bonding hormones, increase, in the same way that makes you feel good to be hugged and the stress hormone cortisol lowers, in both giver and receiver. The latest findings in neuroscience show that when we connect with others in a positive fashion there is a neural synchrony where both the giver and receiver have similar brain wave patterns. In fact kindness and positivity feed on each other to create a positive upward spiral.

It's suggested and Seligman determined that boosts in your positivity are most profound when we create a "kindness day" each week where the plan is to perform a number of kindness acts, such as helping at a shelter, delivering meals and so on. Volunteerism is strongly linked to positivity. I would highly recommend regular volunteer work as an integral part of everyone's life. Seligman showed that participating in even one kindness day would have lasting positive effects for participants, up to months. Clearly a constant focus towards kindness is not only a pretty good strategy for the health of this planet but also is a wonderful self-help tool to grow positivity.

- 4. POSITIVITY RATIO.COM There is a 20 question brief positivity questionnaire created by Fredrickson on —line which will rapidly calculate our positivity ratio. Not only does it create awareness of our current status but we can also track our own progress as we work to improve our positivity ratio. Fredrickson also suggests a great way to boost your ratio is to "TRIPLE YOUR PLEASURE/SAVOUR THE GOODNESS". I like this idea. Remember that we want to improve our positivity so the ratio of positive emotions to negative emotions we experience is 3 to 1 or greater. With this strategy we anticipate a positive event with great enthusiasm, we experience it well, and then we savour it, remembering it fondly, sharing it with our friends, reminding ourselves with pictures or memorabilia. It is too easy to quickly forget a positive event, a vacation, a family outing. Squeeze all the positivity juice possible out of every good event and triple the pleasure; anticipate eagerly, enjoy enthusiastically and savour frequently. There are four kinds of savouring, basking in it if it was congratulatory, thankfulness if it was a blessing, marvelling if it was something to awe and luxuriating if it was a sensory experience.
- 5. Commune with Nature: studies out of the University of Michigan showed that spending time outside in good weather increased positivity as little as 20 minutes per day increased positivity, increased the openness of their thinking and expanded working memory. Isn't it great that something physically healthy is also emotionally healthy. That's why looking at glaciers and hiking all feel so good. It feels good to get physically close to the earth by walking barefoot, getting our hands in the soil gardening, laying on a beach, floating in a lake or river or ocean, sleeping on the ground, anything that puts us in contact with Mother Earth. These feel good mentally, may also have physical benefits such as better oxygenation and may possibly be linked with a grounding effect and a flow of electrons into the earth. Regardless science shows it is good for us to get outside. What a great way to improve memory!
- 6. Connect with people be social! Psychologist George Vaillant study of Harvard Men was a longitudinal study of hundreds of Harvard men beginning in the 1930's. The study showed very clearly that social connections, good relationships and friendships were a key factor in health, longevity, marital success and business success. Subsequent studies have duplicated these results. While people can be also a source of stress, surrounding one with good, successful, loving people will contribute dramatically to positivity. Other studies have shown that social interactions increase one's resiliency and lateral thinking. Make the extra effort to connect and re-connect with loved ones, pick up old friendships and stretch out to make new friendships. Social connections can help keep us happy, healthy and alive for a long time. It may seem pretty obvious yet the science shows we are a social species who are at our best when we are with others.
- 7. Flow **The state of Flow** is the "mental state of operation in which a person performing an activity is fully immersed in a feeling of energized focus, full involvement, and enjoyment in the

process of the activity". In essence, flow is characterized by complete absorption in what one does. Proposed by Mihály Csíkszentmihályi, this positive psychology concept has been widely referenced across a variety of fields. Everyone has at least one thing they do well that is difficult and requires concentration, be it surgery, fly-fishing, needlepoint, playing a musical instrument or bridge. It was said that Edison was in a state of flow when he developed the light bulb and Michaelangelo when he painted the Cistine Chapel. They went for days with very little sleep or food, completely absorbed in their work. When truly in flow it is impossible to think of something else because the task at hand requires complete focus and time stands still.

There is great deal of literature showing a direct correlation between experiencing flow and having a positive effect. A very successful happiness strategy, is to be certain to incorporate into most days something that allows one to go into flow. If we can incorporate it into our job, even better!

Take a moment to write down one or several things that you do that put you into flow. Is it singing, surgery, a musical instrument, fishing, running, flying? What do you need to do to incorporate flow into your life regularly? Find a way to make it easy to access the opportunity, schedule it and have the equipment or whatever you need nearby and ready[©]

8. Mindfulness: to quote the founder of MBSR Jon Kabat-Zinn, 'to be mindful is to be in the present moment, on purpose, by choice and without judgement'. That can be quite a tall order. In the early 80's at the University of Massachusetts Medical School, Kabat -Zinn volunteered to take on a group of patients that conventional medicine could not treat. There were chronic pain patients, psychiatric patients with depression and anxiety disorders and medicine patients including cardiac patients, hypertensives and so on. He taught them to meditate and to be mindful, developing an 8 week course that is taught to this day. It involves a weekly 2.5 hour class and daily homework. Involvement in this course was found to significantly improve pain scores, psychological scores and other medical parameters over the control group. In simple terms learning to be mindful and in the present moment was more beneficial controlling medical symptoms for these patients than pharmaceuticals. This same course has now been taught to tens of thousands over the past 30 years.

There are now over 1300 peer-reviewed papers which chronicle the medical, physical and psychological benefits of meditation. It has been shown that daily meditation is correlated with a better sense of well-being, less anxiety. Meditation increases compassion, forgiveness and self-forgiveness. It improves working memory, improves executive decision- making and task performance – pretty important stuff for a vet – and a myriad of other mental functions.

The thing about mindfulness, is simply this; when we are in the present moment it is not possible to think about other things. This by definition is a very sublime form of happiness

(serenity); the concept is elegant in its simplicity. Just let the nervous system have a rest, just let it be, instead of functioning in overdrive all the time. Mindfulness may be more important now than ever before in a world of constant distraction where our phones have us on an endless treadmill of information and interruptions.

Those who meditate feel more positive and optimistic. In Fredrickson's study, **meditation alone** was able to shift the positivity ratio from less than 3:1 to greater than 3:1 in a few short months. The most powerful meditations are modifications of ancient Buddhist teachings of loving kindness and compassion. In my view this single tool, the loving kindness meditations that are freely available on-line, are the most effective positivity tools.

This is the same loving kindness meditations the Tibetan monks did in the Stanford study. With loving kindness meditation the purpose is to imagine the warm feelings you have towards a loved one and to send these same feelings towards everyone in your sphere starting with your immediate loved ones and extending into friends, community and even the entire world. A mantra such as 'may they be safe, may they be healthy, may they be happy, may they live with ease' is traditionally used.

There are countless websites, books and apps on learning how to meditate. It requires discipline and a small amount of time each day but the rewards are immeasurable.

Breathing, learning to breathe properly, fully and deeply will lower stress and increase positivity. This is a form of 'mini-meditation', as all meditations have a focus on the breath as a component. When you are feeling stressed, stop and take in 10 deep breaths, inhalations and exhalations. It will lower your heart rate and blood pressure, release oxytocin, improve your vagal tone, lower cortisol and you will feel better after.

- 9. Signature Strengths www.authentichappiness.org signature strength Martin Seligman at the University of Pennsylvania, has made available a website with a large number of questionnaires and it includes one which can determine your strengths. This is a 240 question survey to determine which of the 24 strengths are more predominant for an individual and in what order. These 24 strengths include social intelligence, bravery, diligence, kindness and many others. The 5 for which one is rated highest are that person's signature strengths. Studies show that to incorporate our signature strengths into our job and into our daily life is very satisfying and fulfilling. In fact just completing a single task using our signature strengths fully will have a lasting positive effect for a couple of months. If we can incorporate these into our job, our marriage, our family, we can have a dramatic positive effect that can be very long lasting and even permanent.
- 10. Positivity portfolios Fredrickson devised the strategy of creating a portfolio or memorabilia to demonstrate how any of the 10 aspects of positivity, such as joy, gratitude or

love, play a role in one's life. It might be a series of photos, a screensaver, a collection of paraphernalia, a montage or any of a number of possible ways to commemorate positivity that is meaningful to the person. These portfolios should be built with care and consideration. It is suggested to take up to a week to build one. After all it is designed to be a testimony to a particular element of positivity in your life. Fredrickson describes how to build positivity portfolios in more detail in her book, 'Positivity'.

Positivity has been documented to contribute to help build better physical and mental health as well as business success. Almost half of the positivity or happiness we experience is within our control. We can modify the way we think and create lasting patterns of happiness and positivity using a large number of well researched positivity tools. It is not for the faint-hearted; it takes work and dedication in the same way one would embark on a weight-loss or exercise program or learn to play a musical instrument, yet is well worth the effort. I challenge you to take on the tasl of improving your own personal positivity. Leadership starts at the top. What can you do to improve your own positivity? What effect could it have on your business, your happiness, your health? I encourage you to explore the work of the authors discussed above, look at their websites, do your own research and find the strategies that work best for you.