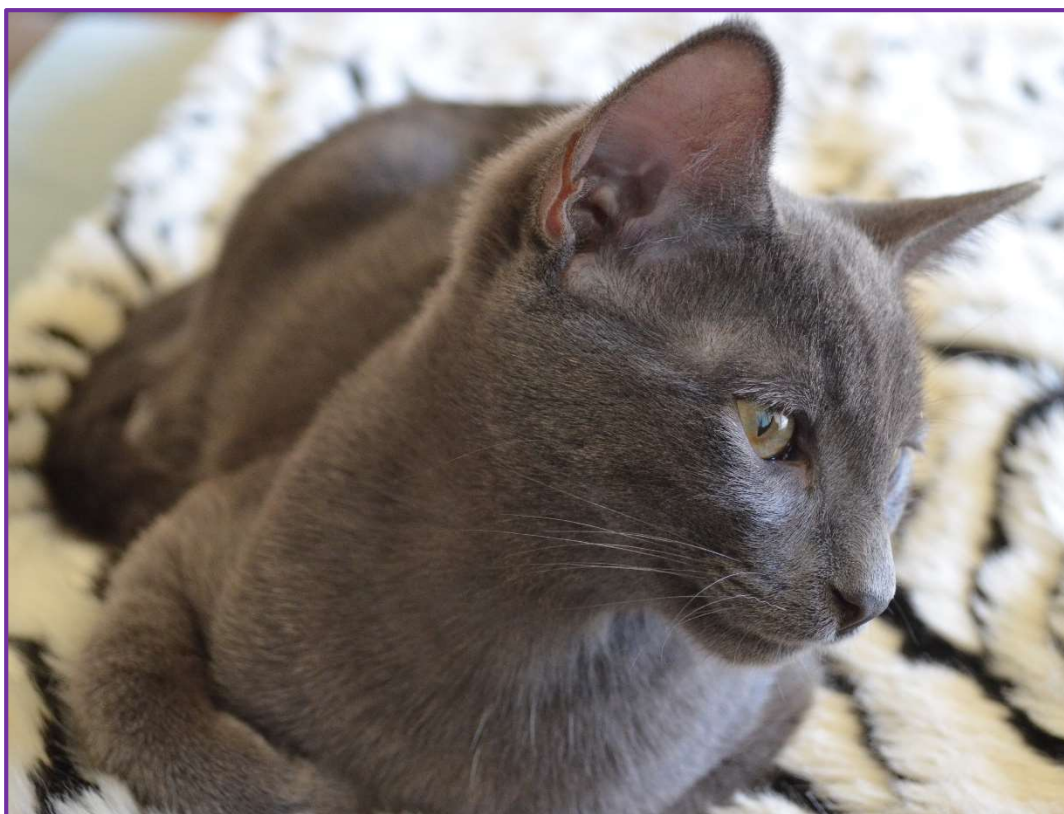




# September Newsletter



“Hardships often prepare ordinary people for an extraordinary destiny” - C.S Lewis

## *Foreword*

Twenty-Five Days...

In many ways, September feels like the busiest time of the year. School starts again, work piles up after summer's break, and fall is suddenly upon us. There is a clarity about September. On clear days, the sun seems brighter, the sky more blue and white clouds take on marvelous shapes. At night, the moon rises gold and cools into silver; and the stars are so big. There is something of jubilee in the annual autumnal beginning. I wish I could still rejoice in that old September feeling, however since 2013, September also brings a flash back to the most difficult days in my life. Days filled with so much darkness and despair

On Monday September 9, 2013 my youngest cat started showing signs of a disease. Few days later, I was sadly introduced to Feline Infectious Peritonitis and its underlying cause, the vile feline coronavirus (FCoV). Even though I had cats all my life and had always provided them with the best veterinary care possible, I had no idea this virus and disease existed. I paid the ultimate price for my ignorance when my beloved Luca succumbed to the dry form of the disease on October 5, 2013.

Luca came into my life when least expected and blessed it in ways I never thought possible. Luca was given many gifts, but the gift of a long and healthy life was not amongst them. We were together for just over a year and his last twenty-five days...the sad end of his life changed mine forever.

It was a beautiful September weekend in Los Angeles when I decided to take Luca to a feline specialist after five days of countless tests and different types of antibiotics. Days filled with complete desperation as our veterinarian couldn't identify what was affecting Luca, and his condition kept deteriorating with each passing day. I remember feeling the air escaping my lungs and the walls caving in on me. I dropped to my knees after hearing those awful three letters: "FIP". I was absolutely devastated and couldn't believe his fate was sealed.

Luca fought this formidable foe with fortitude and dignity but at the end the virus won. He lost his battle with FIP in spite of all our efforts and his bravery. Feline coronavirus took another cat and that "one more cat" was my Luca and life was never the same.

Losing Luca was shattering. I've never experienced that profound grief before even though I've loved and lost many times in the past. It took a long time to come to terms with what had happened to Luca and the unfairness of it all. FIP marked my life and left a devastating emptiness which can only be filled by being involved with, and doing what I can to help find permanent solutions to end FIP, and to help those touched by this dreadful and insidious disease.



Right before I needed to give him the ultimate gift of love. I'd promised Luca his passing was not going to be in vain. That heartfelt promise was the premise for what today are the EndFIP® global initiative and the Luca Fund for FIP Research.

EndFIP® was launched on October 5, 2018 from Assisi, Italy. From the outset I wanted to create a global vision for the EndFIP® brand. I realized this project needed to provide a service that solves a mass market problem using a different approach. The simplicity of the ideas, and the passion, needed to penetrate overseas markets. To accomplish this an infrastructure, a team and a culture needed to be developed and we are deeply appreciative for the role you play in the global quest to end FIP.

We are thrilled that interest and support for our work are growing, because that means we can set our sights on furthering our impact. In this newsletter, EndFIP® provides an overview of feline coronavirus and Feline Infectious Peritonitis and we are asking for your help with our next fundraising campaign.

EndFIP® has the pleasure to announce the "Twenty-Five Days" campaign. All donations received by the Luca Fund for FIP Research from Monday September 9 up to midnight on Saturday October 5 will be matched up to \$2,500. This means your donation will go twice as far with every dollar matched thanks to the generosity of one of our top donors.

Thank you for supporting our mission. It's inspiring to see how you continue to step up and take action to prevent cats from becoming infected with feline coronavirus, thus preventing FIP altogether.

Humbly, and with deep appreciation for all you do...

Maria S. Bonino  
Founder/Director  
EndFIP® | Luca Fund for FIP Research



[www.endfip.com/luca-story/](http://www.endfip.com/luca-story/)



## Feline Infectious Peritonitis

In 1963, American veterinarian Jean Holzworth, first described a peritonitis in cats that caused the abdominal cavity to fill up with fluid. The condition appeared to be infectious, hence the name Feline Infectious Peritonitis (FIP). Within a few years it was recognized that the cause of the disease was a virus, a coronavirus. Feline coronavirus (FCoV) is a highly infectious virus transmitted mostly indirectly, by sharing litter trays with a FCoV shedder cat, or by fomites.

Feline Infectious Peritonitis (FIP) is a devastating viral disease of cats that occurs worldwide and can affect many systems of the body. Luckily most cats infected with FCoV never develop FIP. While the majority of FCoV infected cats remain healthy, sadly it is estimated up to 12% of these cats develop the disease. It is worthwhile to note the incubation period from first becoming infected with FCoV to the development of FIP takes at least 3 weeks. FIP affects cats mostly under two years of age, but cats of any age or breed can develop FIP.



Feline coronavirus (FCoV) is undoubtedly one of the most poorly understood feline viruses and the disease it causes, FIP is unquestionably the most feared disease in any multi-cat environment and the most shattering diagnosis for a pet parent to come to terms with.

The pathogenesis of FIP is complicated. The reductionist view is that it is entirely due to mutation of the virus. Whilst this internal mutation theory is the most widely accepted, no consistent mutation has been identified. The holistic approach is that FIP occurs as a result of a number of factors, including viral load, the immune status and general health of the cat.



The name Feline Infectious *Peritonitis* is slightly misleading: FIP isn't inflammation of the peritoneum (the lining of the abdomen); it is a vasculitis (inflammation of the blood vessels). The clinical signs which the cat develops depends on which blood vessels are damaged, and which organ(s) the damaged blood vessels supplied.

There are two major forms of FIP - an effusive form, often called “wet FIP”, which is characterized by high protein fluid accumulation in body cavities, and a non-effusive form or “dry FIP” which is characterized by pyogranulomatous lesions in any body organ or system.

Although FIP is separated into these two forms, there is really a gradient between these forms and sometimes signs of both forms can be seen. Signs common to both forms of FIP include fluctuating antibiotic unresponsive fever, lethargy, anorexia, and weight loss.





Symptoms of FIP vary greatly from case to case depending on the strain and load of virus involved, each cat's immune system status as well as the organs and/or systems affected. In general, the wet form progresses much quicker than the dry form and in both scenarios the cat's body condition takes a toll with the hair coat becoming rough or dull and the sick cat becoming increasingly lethargic and depressed. Please see below for details:

### *Effusive or wet FIP*

- Persistent and antibiotic unresponsive fever
- Poor appetite
- Lack of appetite
- Weight loss (gradual)
- Diarrhea
- Accumulation of fluid in the chest or abdomen cavities
- Gradual swelling of abdomen (appearing potbellied)
- Breathing difficulties
- Sneezing or runny nose
- Lethargy



### *Non-effusive or Dry FIP*

- Persistent and antibiotic unresponsive fever
- Poor growth in kittens
- Depression
- Anemia
- Jaundice
- Diarrhea
- Ocular signs, inflammation of various parts of the eye(s)
- Neurological symptoms (i.e. lack of motor skills/loss of ability to use hind legs, loss of vision, etc.)



FIP is a notoriously difficult condition to diagnose. Many other conditions present with very similar clinical signs. Because we can't rely on any specific test for a diagnosis, we must combine the history, clinical signs, laboratory test results, FCoV tests results and possibly imaging to come to a "probable" diagnosis.

The tests commonly used are:

- Chemistry panels
- Complete blood count (CBC)
- FCoV titer test on blood/serum with dilution <1:25
- FCoV RT-PCR on effusions
- Rivalta test on effusions



Before treating the cat, it is absolutely essential that every effort has been made to ensure a correct diagnosis. Since Feline Infectious Peritonitis is an immune-mediated disease, the treatment is either modulation of the immune response, or direct action against the virus plus modulation of the immune response.



Feline Infectious Peritonitis is a progressive disease which carries a high mortality rate. It is highly recommended to wait at least 7 weeks after the death of a cat to FIP before obtaining a new cat. FCoV is a moderately resistant virus, surviving up to seven weeks in dried-up cat litter particles and can be killed by most household disinfectants, such as bleach (1:32 dilution with hot water). Therefore, after the loss of a cat to FIP, a detailed hygiene protocol must be followed, including but not limited to disinfecting litter trays, steam-cleaning furniture, vacuuming diligently, etc. If there are already cats in the household who were in contact with the FIP cat, those cats should be tested for FCoV antibodies and the new cat or kitten should

only be introduced after the existing cats have become seronegative, which can take several months to occur. The FCoV infection status of the new cat or kitten should also be established.

We all want stories with happy endings but for cats with FIP the ending is rarely happy. Do not invite pain and heartache into your life. FIP doesn't discriminate and it is merciless. Please prevent kittens/cats from ever becoming infected by feline coronavirus. **NO FCoV = NO FIP!**





## Why Donate?

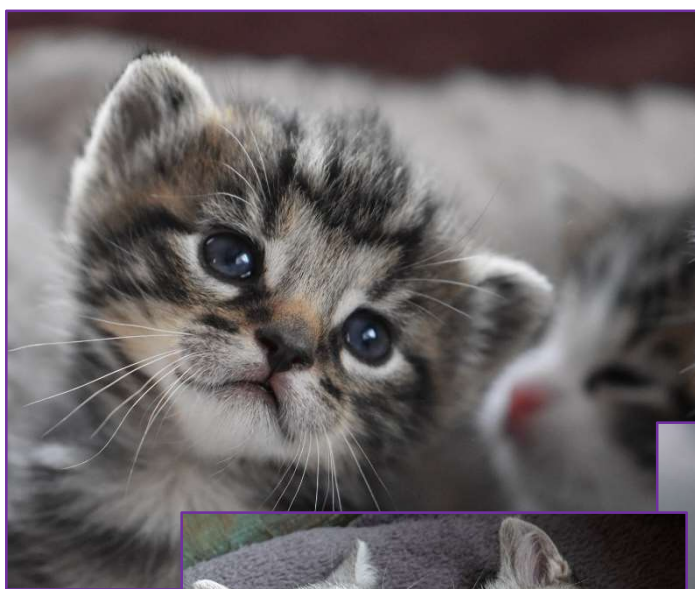
Since first being discovered in the 1960s, Feline Infectious Peritonitis is one of the most studied feline diseases and yet, it remains one of the most poorly understood viral disease of the cat. Much progress has been made since those early days and encouraging new treatments have surfaced in recent years but there's much work to be done in the fields of FCoV and FIP.

In spite of promising treatments, FIP still remains an almost always fatal disease. There is a complete lack of awareness and knowledge about this disease and its underlying cause, the vile feline coronavirus (FCoV). Another important issue is the lack of proper diagnostic tools.

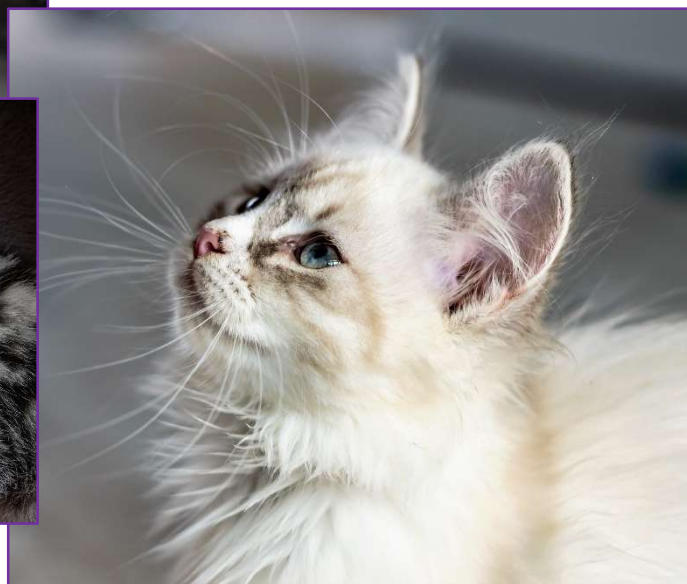
It is up to us, FIP parents who are part of a growing, strong and caring community to create much needed change, not simply by donating to well-known institutions but by investing in ideas and people in whom we believe, based on our principles and values. We are united by the pain and sorrow FIP left in our lives and we must work together to promote kindness to animals and mobilize resources towards ethical and humanely conducted research.

If you believe that FIP research can be successful without the use of laboratory cats, and unconditionally oppose any research that leads to the loss of life through intentional infection and unnecessary and painful experimentation, please donate to the Luca Fund for FIP Research.

The Luca Fund for FIP Research was announced on October 5, 2018 from Assisi, Italy as part of the launch of the EndFIP® global initiative. Our pledge: ethical, cruelty-free research only. No direct or indirect use of laboratory cats. No experimental infection of healthy cats with a deadly virus.



*"We must fight against the spirit of unconscious cruelty with which we treat the animals. Animals suffer as much as we do. True humanity does not allow us to impose such suffering on them. It is our duty to make the whole world recognize it. Until we extend our circle of compassion to all living things, humanity will not find peace"*  
Albert Schweitzer



# MAKE YOUR GIFT STRETCH!



**We need your generosity!** We have 25 days to unlock the match donation of \$2,500. All donations received by the Luca Fund for FIP Research will be match dollar-for-dollar. Please donate by midnight on Saturday October 5, 2019.

Feline Infectious Peritonitis is a global problem. We know that you are reading this newsletter because you care about cats. The alarming truth is that in the time it takes to read these few pages hundreds of cats worldwide are losing their respective battles to this insidious disease.



We can't bring back those we've lost. But together we can use every loss to FIP as a wake-up call, a sign that something must be done! Please, make an urgent gift of any amount right now, knowing your donation will go twice as far with every dollar match through October 5, 2019.

## EndFIP®: A vision and a mission

**Bring awareness | Raise funds for research | Eradicate FCoV and end FIP**

**Help us accomplish our goals.** Your donation is both needed and appreciated. The Luca Fund for FIP Research is committed to exclusively support research that does not use laboratory cats and does not conduct experimental infection of healthy cats with a deadly virus. Help us end FIP, so that one day, no one will have to go through the pain of losing their cherished cat to a disease that has claimed so many for so long.

The Luca Fund for FIP Research is part of the global vision of the EndFIP® project. Your donation to the Luca Fund will be applied to studies conducted at the University of Glasgow School of Veterinary Medicine. The Luca Fund for FIP research is a special fund of the American Alumni of the University of Glasgow established in 2018 to accept tax-deductible donations for Feline Infectious Peritonitis research. AAGU has been recognized by the IRS as a section 501(c) (3) charitable organization. All donations to AAGU are deductible as charitable contributions to the full extent permitted by law.



[www.endfip.com/donate](http://www.endfip.com/donate) | [www.LucaFundforFIP.com](http://www.LucaFundforFIP.com)