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WELCOME to the latest news from the Aspergillus Trust. All members who have registered with the trust will receive this newsletter direct to their registered email account. You can change your options at: www.aspergillustrust.org/updatedetails.asp if you no longer wish to receive newsletters direct to your inbox.

Maureen Dean's Christmas Raffle



Maureen and First Prize - Hamper Contents

Maureen, Ken and family organised a Christmas Raffle and raised the fantastic sum of £745.00 for the Aspergillus Trust.

There were 18 prizes on offer in all and the first prize was a fine hamper of delicious Christmas goodies all put together by Maureen (pictured above). The family all sold tickets around the North West of England to help raise this amazing sum, Maureen wrote:

"A couple of months ago when I contacted you to inform you that we had decided to organise a Christmas Raffle, Ken myself and family never thought we would achieve the grand total of £745 for the Aspergillus Trust.

My family all helped to sell tickets and donated prizes, which contributed to its success and I couldn't have done it with them. I decided to try and raise money for the Aspergillus Trust because I was diagnosed with Aspergillus two years ago.

Professor Denning chose all the Eighteen winning tickets at Wythenshawe Hospital on Friday 7th December 2007"

Our sincere thanks and congratulations to Maureen, Ken, Louise and Laura on raising such a magnificent sum - very well done indeed!

Thanks to Yvonne Gibson

We also offer our heartfelt thanks and condolences to Yvonne Gibson and family and friends who generously donated to the Aspergillus Trust in memory of Yvonne's late husband Colin who sadly passed away in September from Invasive Aspergillosis.

Myconostica Ltd announces first diagnostic products for life threatening respiratory fungal infections

Myconostica, a leading developer of diagnostic products and services for fungal infections, announced details today of its first product in the FXG™ series. FXG™: RESP (Asp +) is a diagnostic product that provides clinicians with reliable and accurate results for two of the most common fungal diseases in less than half a day, enabling them to make faster decisions and to potentially start treatment earlier than was possible before. FXG™: RESP (Asp +) is a multiplex, Real-Time PCR-based product used as an aid for the diagnosis of Aspergillus and Pneumocystis fungi, the common causative agents of life-threatening respiratory infections.

The showcase follows successful clinical evaluation of FXG™: RESP (Asp +) and the CE marking of Myconostica's efficient fungal DNA extraction kit (MycXtra™) to European member countries. Myconostica plans further performance evaluation studies to support the products. Both are being showcased at the prestigious Trends in Medical Mycology Conference (TIMM), Torino, Italy.

Over 10 million people are at risk of life threatening respiratory fungal infections in Europe and North America each year. However, current methods for fungal diagnostics are inherently slow and imprecise relying mainly on culturing patient samples (>3 days). This may lead to a poor diagnosis and contribute to a high mortality. In contrast, in less than half a day Myconostica's FXG™: RESP (Asp +) diagnostic product accurately, specifically and reliably identifies whether the fungi Aspergillus and/or Pneumocystis are causing the infection.

Commenting on the CE marking and showcasing of Myconostica's first products Professor David Denning, Chief Executive and Research Director of Myconostica said:

"Attaining CE mark approval for MycXtra is an important step for Myconostica and the FXG™ product range will answer the need for rapid diagnostics for disease-causing fungi in respiratory and other clinically relevant tissues and body fluids."

Richard Morgan, Chief Executive Officer of Amphion Innovations plc (LSE: AMP), a leading investor in Myconostica, said:

"CE marking of MycXtra™, and FXG™: RESP (Asp +) nearing the market, represents a major milestone for the company. These products will have an extreme impact not only on the field of fungal diagnostics but also on the patients who currently have a lengthy wait for their test results."

Read more about Myconostica and see Professor Denning's video introduction to the showcasing of their product launch here:

www.myconostica.co.uk/

Diesel traffic makes asthma worse

A spot of Christmas shopping in a busy town centre may damage your health as well as your bank balance. Air pollution from diesel traffic can worsen lung function in people with asthma, a team of international researchers has said.

The first "real-life" study showed lung function was worse in patients who spent two hours on London's Oxford Street compared with nearby Hyde Park.

The results are published in the New England Journal of Medicine.

Study leader Dr Paul Cullinan said previous studies had looked at the effects of pollution on a population level, for example comparing air quality with admissions to hospital, or in a laboratory, but not in a real-life scenario.

A total of 60 adults, half of with mild asthma and half with moderate asthma, walked for two hours along Oxford Street, where only buses and taxis are allowed, and then on a separate occasion walked for two hours in traffic-free Hyde Park.

Lung function tests done before and after the walks showed a greater reduction in lung capacity after participants had been exposed to diesel traffic than in the park and more inflammation in the lungs.

The negative effects were greater in those with worse asthma to start with.

Particles

Diesel engines can generate more than 100 times more particles than petrol engines, said the researchers.

The smaller the particle, the deeper it can be inhaled into the lungs and very small particles may even be absorbed into the bloodstream.

Researchers found three times as many ultra-fine particles (less than 0.1 microns in diameter) on Oxford Street compared with Hyde Park.

Oxford Street also had more than three times more nitrogen dioxide in the air and six times as much elemental carbon.

Dr Cullinan, honorary consultant in respiratory medicine at Royal Brompton Hospital in London, said the results were applicable to other urban environments.

"However, we don't know if you would find the same effects with petrol traffic or in people without asthma," he said.

"The real message is not for individuals with asthma but for people who plan traffic and build engines.

"With over five million people in the UK suffering from asthma, it is important that we that we urgently consider practical ways to reduce harmful emissions from diesel vehicles."

Dr Keith Prowse, chairman of the British Lung Foundation: "It very clearly and vividly demonstrates the negative impact diesel fumes have on lung health, especially in asthmatics."

Leanne Male, assistant director of research at Asthma UK said it was already known that living near a busy road was associated with worsening of asthma symptoms but it was unclear which chemicals were to blame.

"Further research like this will provide the answers to help us improve the lives of the millions of people with asthma in the UK who are affected by traffic fumes every day"

Source: Laura Gallagher [Imperial College London](#)



AT eBay for charity

Remember if you have any unwanted items you can now help us by selling on eBay and you can donate all or part of the proceeds to the Aspergillus Trust. Its incredibly easy to sell and a great way to help us raise much needed funds.

To see how it works in 5 easy steps go to:

<http://www.missionfish.org.uk/About/howitworks.jsp#forsellers>

New Technique reveals insights into Lung Disease, UK

Doctors at the Universities of Leicester and Nottingham are collaborating to use a magnetic resonance technique to image and quantify the air spaces inside the lungs. The results of their research may lead to a link between childhood disease and later degenerative lung disease (COPD).

There are relatively few centres around the world which have access to this particular magnetic resonance technique, which is based in Nottingham University. Researchers at the University of Leicester have recruited cohorts of some 10,000 children - the largest to focus on respiratory illnesses in childhood. The two groups have combined forces, with a joint grant from the Wellcome Trust.

The method relies on the fact that certain noble gases (which are relatively rare in the atmosphere and are very un-reactive), when hyper-polarized in a very strong laser beam, can be detected by magnetic resonance methods.

Tests involve individuals inhaling a very small quantity (in this case 10ml or two teaspoons) of the hyper-polarized helium-3 gas. This technique provides the key to unlock a whole new area of research in the field of lung development.

This is quite different from the magnetic resonance scans are now commonplace in British hospitals. However, all magnetic resonance techniques function without the use of radioactive substances or ionising radiation (as is the case with x-ray techniques). They are thus very safe, and have no known side effects and are ideal for research into childhood illness.

Read the full news report here:

http://www.aspergillustrust.org/forums/topic.asp?TOPIC_ID=50

Infectious Disease Specialists establish NIH-Funded Program on Fungal Infections at Pitt

Minh-Hong Nguyen, M.D., and Cornelius J. Clancy, M.D., infectious disease specialists with expertise in fungal infections, have joined the Division of Infectious Diseases at the University of Pittsburgh School of Medicine.

Dr. Nguyen will serve as director of the Transplant Infectious Diseases and the Antimicrobial Management Programs at the University of Pittsburgh Medical Center (UPMC).

Infections are leading causes of severe illness and death among transplant recipients because of the strong immune suppressive drugs patients must take to prevent rejection of transplanted organs. Antimicrobial management programs are crucial in preventing the emergence of antibiotic-resistant infections.

By combining the transplant infectious diseases and antimicrobial management positions, UPMC has taken the lead in recognising that both treatment and prevention are crucial in curtailing the spread of difficult-to-cure infectious diseases.

Drs. Nguyen and Clancy will address several critical needs at UPMC, including the development of state-of-the-art care for patients who suffer from fungal infections, the implementation of antifungal and antibacterial management strategies and the creation of rapid diagnostic tests for fungal infections among high-risk patients.

Read the full news article here:

http://www.aspergillustrust.org/forums/topic.asp?TOPIC_ID=51

Merck Says Cancidas may be a Therapeutic Intervention for Paediatric Patients with Invasive Fungal Infections

Merck & Co. Inc. announced that interim results from Phase II clinical trial of Cancidas (formerly Caspofungin MSD), which was evaluated as a treatment for patients three months to 17 years of age with documented or suspected fungal infections.

They revealed the preliminary data from trial that the first 39 patients enrolled in the study found that 74% of trial participants treated with Cancidas achieved complete or significant improvement in signs and symptoms related to each infection type studied.

The company noted that these interim results are a preliminary indicator that Cancidas may be a therapeutic intervention for paediatric patients with invasive fungal infections.

The company presented these results on October 7, at the 45th Annual Meeting of the Infectious Diseases Society of America

Read the full interim results and news release here:
http://www.aspergillustrust.org/forums/topic.asp?TOPIC_ID=52

Medical Acoustics' Revolutionary Diagnostic and Therapeutic Device, The Lung Flute(R), Now Registered In the European Union

Medical Acoustics LLC announced that it has successfully registered its Lung Flute(R) as a Class 1 medical device for sale in the European Union. Medical Acoustics demonstrated conformity with essential health and safety requirements set out in European directives. It is now qualified to apply the CE mark (Conformité Européenne) for marketing the Lung Flute(R) in the EU, both for diagnostic and therapeutic applications.

Medical Acoustics officially launched the Lung Flute® within the European Union at MEDICA, the world's largest medical trade fair, in Dusseldorf, Germany, in November. Its strategy is to penetrate the EU market through leading medical device distributors, especially those that serve the pharmaceutical, medical and public health markets specialising in lung and respiratory diseases.

"The Lung Flute® provides EU clinicians with a safe, easy-to-use means of obtaining high quality sputum samples for the improved diagnosis and treatment of a myriad of lung and respiratory diseases" said Terence Cryan, President of Medical Acoustics. "The applications for our device are far-ranging. They include, for example, public health officials using the Lung Flute® to quickly and effectively gather sputum samples to screen for tuberculosis (TB), or even health clinics using it to clear the lungs of asthma patients. Our novel technology is now accessible to over 300 million people throughout the European Union"

The standard method for obtaining lung secretions for testing involves a person breathing hypertonic saline into their lungs. This method is very uncomfortable, and in addition, cannot be done more frequently than every 48 hours.

Read more here:
http://www.aspergillustrust.org/forums/topic.asp?TOPIC_ID=54

Aerosol Launches Immune Response in Lungs to wipe out Lethal Infections

An inhaled immune system stimulant protects mice against lethal pneumococcal pneumonia and other deadly bacterial, viral and fungal infections of the lungs, a research team led by scientists at The University of Texas M. D. Anderson Cancer Center reports at a major scientific meeting.

Their findings have implications for protecting immunocompromised patients against infection and the general public against respiratory epidemics and biological weapons. The research is a featured presentation at the annual meeting of the American Society for Cell Biology Dec. 3 in Washington, D.C.

"This aerosol stimulates an innate immune system response in the lung lining fluid that kills the invading pathogens virtually on contact" says Brenton Scott, Ph.D., post-doctoral fellow in M. D. Anderson's Department of Pulmonary Medicine, and first author of the abstract presented at ASCB. "It also works in mice with suppressed immune systems"

The innate immune system is the body's inflammatory first response to infection or injury. It produces proteins and peptides that act as natural antibiotics to broadly kill invading bacteria, viruses or fungi.

"Pneumonia is a leading cause of death from infection in the United States and a major cause of death among cancer patients and others with suppressed immune systems" says Burton Dickey, M.D., professor and chair of pulmonary medicine and senior author of the research.

Untreated mice exposed to *S. pneumoniae*, the most common form of bacterial pneumonia, died within days. Mice treated with the Aerosolized Lung Innate Immune Stimulant (ALIIS) developed by the researchers, two hours before exposure had an 83 percent survival rate. All of the mice treated between 4 and 24 hours before exposure survived.

The effect slowly declines over five days, Scott says. Giving the stimulant after infection also provides some protection.

The team got similar results testing ALIIS as a protectant against lethal doses of several other types of pneumonia, as well as influenza virus, the mould aspergillus, and the Class A bioterror agents anthrax, bubonic plague, and tularemia.

ALIIS consists of a purified extract of a common bacterium, *Haemophilus influenzae*, that causes ear and sinus infections in children. The bacterium is essentially broken open, purified and administered as an aerosol.

University of Texas M. D. Anderson Cancer Center
1515 Holcombe Blvd., Box 229
Houston, TX 77030
United States

Read the full press release here:
http://www.aspergillustrust.org/forums/topic.asp?TOPIC_ID=53

"Christmas is not a time nor a season, but a state of mind. To cherish peace and goodwill, to be plenteous in mercy, is to have the real spirit of Christmas"

Bob Hope

In The Fight against Fungal Infections, Gamma Interferon Offers Hope

Interferon, the "superhero" cure for viral infections, may be a strong weapon in the battle against fungal infections in immunocompromised patients, according to an article in the November issue of *Microbiology Today*.

Fungal infections (mycoses) were once seen as exotic diseases, but this is changing rapidly. Although rarely life-threatening in healthy patients, fungal infections are a major problem for the immunocompromised, including HIV patients and people receiving chemotherapy for cancer. Treatment is becoming difficult due to fungal resistance to the antifungal therapy, the variety of disease-causing fungi found and the toxic effects of conventional therapy. Now, scientists believe gamma interferon, a protein molecule produced by human cells in response to infections, may help to fight fungal infections. "Immune cells called neutrophils are rapidly recruited to the site of infection and play an essential role in fungal killing" say Drs. Javier Capilla, Karl Clemons and David Stevens, of Santa Clara Valley Medical Center, Stanford Medical School and the California Institute for Medical Research. "Gamma interferon enhances the mechanisms of these cells to make them more potent killers of fungi"

Tests on many fungal infections, including blastomycosis, candidosis and aspergillosis have shown that gamma interferon has beneficial effects in terms of the reduction of the fungus in the organs and on animal survival.

Read the news article here

http://www.aspergillustrust.org/forums/topic.asp?TOPIC_ID=55

Christmas Trees: Source of Indoor Mould?

Live Christmas trees may bring more than the fresh pine scent of the holiday season into homes, according to a new study. This study grew out of a consistent and dramatic increase in asthma and sinus complaints among patients every winter, which is especially pronounced during the holiday season, notes study researcher John Santilli, MD who says:

"As mould growth is common in the area surrounding outdoor foliage, we hypothesised that the presence of a live Christmas tree may be contributing to indoor mould" Our study demonstrates that a live Christmas tree can be a significant source of mould spores.

Read the full study report here:

http://www.aspergillustrust.org/forums/topic.asp?TOPIC_ID=56

On a final note

On behalf of everyone involved with the Aspergillus Trust a big **Thank You!** to all who have helped and contributed towards our work during 2007.

In the words of an old Irish blessing...

May love and laughter light your days,
and warm your heart and home.
May good and faithful friends be yours,
wherever you may roam.
May peace and plenty bless your world
with joy that long endures.
May all life's passing seasons
bring the best to you and yours!

...we wish all our members and supporters
'Compliments of the Season' and
'A Healthy, Happy and Peaceful 2008'

Jim Breen

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Warming winter Recipe Potato and Sweetcorn Chowder

Ingredients - Serves 6

Preparation time 15 Minutes Cooking Time 35 Minutes

6 Cobs Sweetcorn
2 Tablespoons Vegetable Oil
1 Onion, finely diced
3 Garlic Cloves, crushed
1 Celery Stalk, diced
1 Carrot, peeled and diced
2 Large Potatoes, peeled and diced
1 Litre (4 cups) Vegetable or Chicken stock
2 Tablespoons finely chopped flat leafed (Italian) Parsley

Method

Bring a large pot of salted water to the boil and cook the sweetcorn for five minutes.

Reserve 250ml (1cup) of the cooking water.

Cut the corn kernels from the cob, place half in a blender with the reserved cooking water, and blend until smooth.

Heat the oil in a large saucepan, add the onion, garlic celery and a large pinch of salt and cook for five minutes. Add the carrot and potatoes, cook for a further five minutes, then add the stock, corn kernels and blended corn mixture. Reduce the heat and simmer for 20 minutes, or until the vegetables are tender.

Season to taste, stir in the chopped parsley before serving.

This recipe is from a recipe book called 'Veggie Food' by Murdoch Books ISBN 1740453050 UK price £9.99

HPA Statement on Pseudomonas, UK

There has been some recent media interest in *Pseudomonas* infections. *Pseudomonas* are bacteria which are normally found in soil and ground water. *Pseudomonas* infections rarely affect healthy people and would be most likely to affect those who are already very sick.

The majority of *Pseudomonas* infections are treatable with antibiotics. These bacteria can cause a range of infections from mild skin infections to urinary tract infections. They can also cause a variety of bloodstream infections, particularly in patients with serious burns and those who are severely immunosuppressed such as cancer and AIDS patients. Most infection cases are reported from intensive care, burns, spinal injuries or cancer units.

Pseudomonas infection may be spread by transfer of the bacteria from contaminated sources or medical equipment to patients. Unlike MRSA, *Pseudomonas* survives poorly on healthy skin and unlike *Clostridium difficile* is not a significant resident of the bowel and does not give rise to diarrhoea.

On occasion cross infection may occur between patients with *Pseudomonas* on a hospital ward or intensive care unit but often to a considerably lesser extent than that seen with MRSA and *C difficile*. Outbreaks of infection across and between hospitals are also very rare.

Actions to help prevent patients contracting *Pseudomonas* include effective hand hygiene, and good infection control measures.

You can read the statement in full here:

http://www.aspergillustrust.org/forums/topic.asp?TOPIC_ID=57