Asthma in the Emergency Department  

We are conducting a research study on asthma that is well controlled to find out what is the fundamental difference that causes asthma exacerbations in some people. So, if you are ever in the ED with an asthma exacerbation, keep your eye out for one of our coordinators. And if you have asthma and think you might want to participate, please don’t hesitate to contact us at 847-LUNG!
New Face at the Vermont Lung Center

Joan Lippman

What do you do at the Vermont Lung Center?
I’m very excited to be a new Clinical Research Coordinator in the Vermont Lung Center. Being able to work in the Lung Center has personal significance for me in that both my parents suffer from lung disease and I, myself am an asthma sufferer. I will be coordinating primarily cystic fibrosis studies. This is a new position for me which is a perfect blend of my nursing background with my scientific research experience.

Where did you grow up?
I grew up in a small rural town in northern Connecticut in the 1950’s. It’s still one part of Connecticut which has remained pristine. But I then moved with my family to the sparkling city of Las Vegas, Nevada, where I finished high school and learned about a completely different lifestyle. I am happy to be back home in sweet New England but often, on a sub-zero day in the middle of winter, I dream of that warm, sunny desert climate and wonder if living in that big western city might not be so bad.

Where did you go to school?
I did my nurse’s training in Connecticut and after enjoying many years of nursing, I went back to college for a degree in biology at the wonderful Trinity College of Vermont. I very much enjoyed nursing people while they were sick, but gradually become more interested in what processes were making them sick in the first place. It was that curiosity which brought me back to college and into the research laboratory.

Why did you choose to live in Vermont?
Where else can one live in such a dynamic area and still maintain a pleasantly paced lifestyle while enjoying beautiful landscape and fun people?

What is your favorite thing about working in research?
First of all, I find all aspects of science very interesting. Secondly, research is one of the most deliberate ways I know of to help improve the lives of many people at once. And third, scientific and medical studies utilize the most up-to-date knowledge from researchers around the world. I like that this all makes us “a small world after all”.

Interesting in Volunteering?

Things to know:
1) The Vermont Lung Center staff is responsible for making sure you know what is expected of you in regards to the study.
2) Once the study is explained to you, you will be asked to read and sign an “Informed Consent”. This form is designed to explain everything you need to know about the study.
3) Studies may be therapeutic (involving observation of lung function). However, The Vermont Lung Center can make no claims that your involvement in a research study will improve your condition.
4) Compensation may or may not be provided to you for your involvement in a study. If compensation is provided, it is meant to cover your time and expenses incurred—it does not constitute employment.

Interested in finding out more about volunteering for a research study, please call us at (802) 847-2193

Ask Dr. Charlie

Charles G. Irvin, PhD

Does heartburn worsen my asthma?
Heartburn can often be a sign of gastroesophageal reflux (GERD); however the exact relationship between GERD and asthma is uncertain. The SARA (adults) study that we just finished and SARCA (children, young adults) that is enrolling volunteers are designed to answer the question of whether GERD worsens asthma.

Does laughing cause an asthma attack?
In some people strong emotion that causes laughing or crying can trigger an asthma attack. The increase in breathing dries the airways and causes an attack. Fortunately it is usually quickly treated with your rescue inhaler.
**List of Current VLC Studies**

<table>
<thead>
<tr>
<th>Study Title</th>
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<th>Coordinator</th>
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</tr>
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<td>3 visits</td>
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<td>Methacholine Bronchoprovocation – Influence of High Potency Inhaled Corticosteroids in Asthma (MeCIS) study</td>
<td>Charles Irvin, Ph.D., Director, Vermont Lung Center</td>
<td>Stephanie Burns</td>
<td>People with and without asthma between the ages of 12-69</td>
<td>Up to 5 study visits</td>
<td>Up to $250</td>
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For more information on these studies, please visit our website @ www.vermontlung.org

Vermont Food Allergy Organization will be holding its 4th Annual Food Allergy Conference and fundraiser on Wednesday October 22, 2008 at the Hampton Inn in Colchester from 6pm - 9pm.

Speakers that evening will be: Dr. Charles Irvin, Director of the Vermont Lung Center and an internationally known researcher who will be discussing allergies/asthma and the latest research. Also speaking, Mr. Mike Mulcahy, Parent Support Director of the Vermont Parent Information Center who will be discussing school accommodations for life-threatening food allergies and how to implement them into an IEP.

Tickets are $10.00 per person with pre-registration or $12.00 at the door. To obtain tickets send a check for amount of tickets being purchased, to Vermont Food Allergy Organization, 97 Gardenside Lane, Shelburne, VT 05482. When purchasing tickets, please include names of attendees. For more information call VTFAO's office at (802) 985-5050.
SARCA

We now have an important asthma study going on for children between the ages 6 and 17 years. This study, the “SARCA Study” (Study of Acid Reflux in Children with Asthma) is sponsored by the National Institutes of Health, and we are participating in it as part of the American Lung Association-Asthma Clinical Research Centers network.

The study is similar to the “SARA” study, which you may have heard of, and some of you may even have taken part in. We are trying to determine whether treatment of gastroesophageal reflux disease in children can improve control of their asthma. Many may think that gastroesophageal reflux disease simply affects adults (how many children complain of indigestion?) but pediatricians have long realized that reflux is common in children, may cause chronic cough, and maybe even aggravate asthma. Children may not have any obvious symptoms of reflux, and so it may be hard to pinpoint the cause of the cough or worsening asthma.

Similar to the SARA study, this study enrolls children with symptoms of poorly controlled asthma. The children perform lung function tests (blowing into a machine), and with the help of their parents answer questions about their asthma symptoms. Some children receive treatment for reflux, the treatment for acid reflux (prevacid®, generic name lanzoprazole) is very commonly used to treat both adults and children with acid reflux, other children receive a placebo (a pill that looks the same, but doesn’t contain any medication). Neither the study coordinators, or the child (or their parents) know which treatment the child is on.

Nationwide we hope to recruit about 400 children to this important study. Poorly controlled asthma is a major cause of illness and hospitalization in young children, and so this is a particularly important study which we are excited to be a part of.
Another Reason to Watch your Weight

Anne Dixon, M.D.

Every day we hear a new study about the growing problem with Americans gaining weight. For years we’ve known that if you gain weight, you’re at risk of diabetes, high blood pressure and heart attacks. We’re also beginning to realize that you’re at risk of asthma. Not only that, but we’ve found that people who are overweight with asthma may not respond as well to asthma treatment – we know this from some of the studies that many of you have taken part in over the last few years.

At the VLC we’ve been studying the lungs of people having gastric bypass surgery – and we hope to complete this study in the next 12 months (watch this space!). Obviously gastric bypass surgery is not a great solution to breathing problems in most people who are overweight. Neither is simply being told to lose weight – most people have been trying for years. So how else can we treat breathing problems in people who are overweight?

Some of the early research from our studies on obesity and asthma have suggested that some of the chemicals produced by fat tissue may actually be affecting the airways of people who are overweight, to give them asthma. We want to find out if altering these chemicals produced by the fat cells can improve asthma.

Certain medications that are used to treat diabetes can change the chemicals produced by fat cells. One of these medications is pioglitazone. Pioglitazone has been used for many years to treat diabetes. Scientists have found in the laboratory that pioglitazone treatment can improve asthma, but no one has studied pioglitazone in people with asthma before.

Dr Dixon, working with investigators at Emory University is starting a study to determine if pioglitazone is an effective treatment for people who are overweight and have asthma. This will be a 3 month long study in which study participants will answer questions about their asthma, perform regular breathing tests, and have blood tests to monitor the safety and effects of the medication.

If you are interested in learning more about this study, please contact the Vermont Lung Center and ask to speak to Laurianne Griffes who will be able to give you more information about this study.
Interesting in Volunteering?

Things to know.

1) The Vermont Lung Center staff is responsible for making sure you know what is expected of you in regards to the study.
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If you are interested in finding out more about volunteering for a research study, please call us at (802) 847-2193.

New Face at the Vermont Lung Center

Jayanthi Garudathri

Where did you go to school? Pre-school through my Master's in India. I completed a second Master's here at UVM.

Why did you choose to live in Vermont? I got admitted to the PhD program in the Microbiology and Molecular Genetics Department, and I was attracted to some of the research projects in the department.

What is your favorite thing about working in research? The intellectual challenge. Research allows me to use my innate analytical and critical thinking skills to the fullest.

CHAMP CAMP for KIDS with ASTHMA

Summer fun, adventure, and learning!

Coutts-Moriarty Camp, Lake Salem, Derby, Vermont

July 27 to August 1, 2008

Champ Campers Master Skills to Control Their Asthma

Champ Campers participate in daily one-hour Learning Labs where they increase their knowledge and build skills to manage asthma through fun, interactive, hands-on learning activities with other children living with asthma. Learning Labs are designed to increase children’s confidence in managing their asthma while leading an active life.

Campers participate in a wide variety of fun activities throughout the week:

Specialties: woodworking, woodcarving, traditional and primitive fire building, survival shelters, music, theater, cooking and baking

Recreation: archery, canoeing, kayaking, swimming, shooting, sports, climbing, ropes course, mountain biking, trail hiking, fishing, capture the flag

Arts and Crafts: candle making, soap making, collages, friendship bracelets, jewelry making, piñatas, nature art, mural paintings, and sewing

For an application or more information, call the American Lung Association of Vermont at 1-800-LUNG-USA (within Vermont) or (802) 876-6500, or e-mail Alissa Ganje at aganje@vtlung.org.
ASHTMA

Study of Acid Reflux in Children with Asthma (SARCA)
Primary Investigator: Charles Irvin, Ph.D., Director, Vermont Lung Center
Coordinator: Stephanie Burns
Who: Children age 6-17 with asthma who do not have heartburn
What: 9 visits over 7 months
Compensation: up to $550

Study of the Impact of Body Mass Index on Asthma
Primary Investigator: Anne Dixon, M.D., Director of Clinical Research
Coordinator: Laurianne Griffes
Who: People with asthma and also people without asthma who have Body Mass Index of 35 to 50
What: 10 visits over 12 months
Compensation: up to $775 for asthmatics, up to $250 for people without asthma

Weight Loss and Asthma
Primary Investigator: Anne Dixon, M.D., Director of Clinical Research
Coordinator: Lorraine Bourassa, R.N.
Who: People with asthma and also people without asthma undergoing gastric bypass surgery
What: 10 visits
Compensation: up to $775 for asthmatics, up to $250 for people without asthma

The Effect of CPAP on Asthma Control
Primary Investigator: Anne Dixon, M.D., Director of Clinical Research, Jaideep Sood, M.D.
Coordinator: Stephanie Burns
Who: People with asthma and untreated sleep apnea
What: 4 visits, 2 before CPAP treatment and 2 after CPAP treatment
Compensation: Up to $100

Asthma Exacerbations: Physiology, Upper Airway and Fibrin
Primary Investigator: Charles Irvin, Ph.D., Director, Vermont Lung Center
Coordinator: Sherburn Lang
Who: Looking at possible mechanisms that may cause a worsening of asthma
What: 4 visits, the first one in the ER with an asthma exacerbation
Compensation: up to $275

Forced Oscillation Mechanics in Mild Asthmatics
Primary Investigator: Lennart K.A. Lundblad, Ph.D.
Coordinator: Sherburn Lang
Who: People with mild asthma and people without asthma
What: 3 visits
Compensation: up to $15

Role of Leukotrienes and Adenosine in Hyperpnea-Induced Bronchospasm Determined by Dynamic Analysis of Exhaled Breath Condensate
Primary Investigator: John Morrison, D.O.
Coordinator: Laurianne Griffes
Who: People with physician-diagnosed Exercise-Induced Asthma
What: 2 visits
Compensation: up to $100

CYSTIC FIBROSIS

Comparison of Standard Tobramycin Inhalation Solution to the new Experimental Tobramycin Inhalation Powder in Cystic Fibrosis
Primary Investigator: Thomas Lahiri, M.D.; Laurie Whittaker, M.D.
Coordinator: Lorraine Bourassa, R.N.
Who: People with Cystic Fibrosis
What: 9 visits
Compensation: up to $340

For more information on these studies, please visit our website @ www.vermontlung.org

Vermont Food Allergy Organization will be holding its 4th Annual Food Allergy Conference and fundraiser on Monday evening, June 23, 2008 at the Hampton Inn in Colchester from 6pm - 9pm.

Speakers that evening will be: Dr. Charles Irvin, Director of the Vermont Lung Center and an internationally known researcher who will be discussing allergies/asthma and the latest research. Also speaking, Mr. Mike Mulcahy, Parent Support Director of the Vermont Parent Information Center who will be discussing school accommodations for life-threatening food allergies and how to implement them into an IEP.

Tickets are $10.00 per person with pre-registration or $12.00 at the door. To obtain tickets send a check for amount of tickets being purchased, to Vermont Food Allergy Organization, 97 Gardenside Lane, Shelburne, VT 05482. When purchasing tickets, please include names of attendees. For more information call VTFAO’s office at (802) 985-5050.

Ask Dr. Charlie

I hear that there are things living under my bed that can cause asthma—Is that true?
Unfortunately, yes, that is true—at least for some people. Dust mites are very small bugs that live in dust and eat our dead skin, but it's their feces and dead body parts that can trigger allergy and asthma in some people.

What can I do about them?
If you are allergic to house dust mites then there are many things that you can do to reduce your exposure such as hot (>130 degrees F) wash sheets, bed/pillow encasements and buying a HEPA vacuum. There is a book by Jeffrey May entitled “My House is Killing Me!” that is helpful.
Last year, the National Asthma Education and Prevention Program released its fourth revision of the Asthma Guidelines, which were first published in 1991 and then updated in 1997 and 2002. This pace reflects the rapidly changing understanding and view of asthma over the last 17 years. The original guidelines helped us focus on asthma as a disease of airway inflammation, with emphasis on measuring lung function, assessing the individual’s environment, using appropriate medications, and improving patient education. With the introduction of long-acting bronchodilators, the 1997 revision developed the idea of asthma treatment falling into two categories: the long-term control of disease with such medications as inhaled corticosteroids and long-acting bronchodilators, and the short-term relief of acute symptoms with short-acting bronchodilators. The 2002 guidelines further fine-tuned some recommendations regarding asthma diagnosis and care.

The 2007 guidelines now provide a major revision of the last full report from 1997. There is an extensive review of the pathophysiology of asthma, an update on medications, a reclassification of age-related recommendations, and, in particular, a major emphasis on defining asthma severity and achieving asthma control. This emphasis comes from the realization that many patients state they feel fine when in fact they continue to have serious problems with symptoms or lung function, thus leading to suboptimal asthma care. In addition, studies show that providing intensive therapy to patients with seemingly good control can in fact improve their asthma even further.

The guidelines define both severity and control in terms of the degree of impairment, based on lung function, symptoms, and ability to carry on normal daily activities, as well as the risk for future exacerbations, loss of lung function, and adverse effects from medications. An overall strategy of care is recommended: first assessing severity and initiating appropriate treatment, then re-assessing control in 2-6 weeks and adjusting therapy accordingly. Therapy steps are similar to previous guidelines, except now there are specific recommendations that take into account the concern over use of long-acting beta-agonists, and better define the roles of alternative therapies, such as leukotriene antagonists, theophylline and omalizumab. Finally, there is extensive discussion of the importance of addressing adherence to therapy, environmental factors and co-existing conditions that may make asthma worse.

What does this all mean for the care of patients with asthma? The guidelines provide comprehensive information that should assist the physician in providing optimized and standardized care. Unfortunately, it is well known that many patients continue not to receive the care recommended by published guidelines. This fact emphasizes the importance of education and the physician-patient relationship in making the guidelines successful.
Idiopathic Pulmonary Fibrosis: What is it?
Idiopathic pulmonary fibrosis, otherwise known as IPF, is a progressive scarring of the lung over time. When the lungs become more scarred they are unable to expand and the patient develops a restrictive pattern on pulmonary function testing. In the majority of patients insidious shortness of breath or dyspnea is the initial symptom and often is unnoticed until a significant amount of scarring has occurred. The reason many people do not seek medical attention earlier because this disease typically affects those over 50 and most attribute their symptoms to aging. Some patients may present with a dry hacking cough for a number of months and are misdiagnosed as having heart failure; others might initially develop a severe heart failure because on physical examination chest radiograph changes long before they have symptoms.

What causes the disease?
No one knows for certain. Idiopathic pulmonary fibrosis belongs to a small group known as the idiopathic interstitial pneumonias of which IPF is the most common. Recent research suggests that whenever the lung is injured by something we inhale there are numerous events/reactions that occur leading to self healing using the bodies own immune system. However, in pulmonary fibrosis it progresses to inflammation and then on to a fibrotic state somewhat like a scratched CD or LP. Because of this scarring, oxygen is unable to cross from the lung into the blood stream and patients typically require oxygen.

Why wasn’t I diagnosed earlier?
Unfortunately until roughly 5-7 years ago most people thought this disease was rare believing that it occurred in only 7/100,000 people. More recent estimates suggest that there are roughly 80,000 cases in the US and 30,000 new cases a year. IPF is most often confused with congestive heart failure because on physical examination patients have crackles or rales (which sound like Velcro) that are similar to the sounds one hears when the lungs are evaluated initially by a cardiologist delaying the time of referral to a pulmonologist. Other possible disorders that present in a similar fashion include patients with collagen vascular disorders such as rheumatoid arthritis or scleroderma, chronic hypersensitivity pneumonitis or chronic sarcoidosis. Other advancements that help with making an earlier diagnosis include the recognition by radiologists and physicians of some of the early subtle changes on a chest radiograph. In fact many patients have chest radiograph changes long before they have symptoms.

How is Idiopathic Pulmonary Fibrosis diagnosed?
The gold standard for diagnosis remains an open lung biopsy which involves having several small pieces of lung tissue are removed and sent to the pathologist. Over the last few years a number of studies have been done to see if a group of clinical factors and tests can be used to accurately make the diagnosis of IPF without an open lung biopsy. Results suggest, by using a combination of CT scans, pulmonary function tests, blood work and clinical history that an experienced pulmonologist can make an accurate diagnosis. Patients who are sent for biopsy are those with atypical presentations who don’t fit the classic clinical picture.

Is IPF contagious? Is my family at risk?
IPF is not contagious however your family may be at risk since there is an entity known as familial idiopathic pulmonary fibrosis. There are number of researchers searching for a pulmonary fibrosis gene or genes to see if those at risk can be identified early. If one has a diagnosis of IPF or has a family member with Idiopathic Pulmonary Fibrosis it might be advisable to take a family history for lung disease but the majority of idiopathic pulmonary fibrosis is sporadic and does not run in families. There are some risk factors however and these include, smoking, male gender, age, ethnicity (more common in Caucasian), and occupations such as: farming, hairdressing, raising birds, stone cutting/polishing, exposure to metal dusts, vegetable and animal dusts.

Can it be cured?
IPF patients are typically managed with a variety of agents; these are typically an immunosuppressive agent and low dose steroids. The only real cure is a lung transplant which is fraught with risks and problems. The age cutoff for a transplant at most centers is 65 years young. Today there are a number of clinical trials all over the United States and world testing various agents to treat the disease. The Vermont Lung Center is participating in a number of these trials testing new treatments for people with IPF. We hope that these trials will find new and effective treatments for this devastating disease.
New Face at the Vermont Lung Center

Julie Martin

What do you do at the Vermont Lung Center?
I work as dietitian for research studies at the Vermont Lung Center and I also coordinate research studies in the medical intensive care unit at Fletcher Allen Health Care.

Where did you grow up?
I was born in California but I spent most of my childhood in Portland Oregon.

Why did you choose to live in Vermont?
I moved to Vermont 17 years ago because it looked like a great place to raise my children. My two sons are now in high school in South Burlington.

What is your favorite thing about working in research?
It is important for me to feel my job has a purpose in helping people. In our research, we are working toward developing or testing new treatments to hopefully improve lung function and health. It is satisfying to think that our patients or future patients will benefit from the work we are doing.

Clinical Trial of Adult Stem Cells for COPD

Daniel Weiss, M.D., Ph.D.

Stem cells have been prominent in recent news as potential therapeutic approaches for many diseases including lung diseases. Armed with the capacity to limitless copy themselves and grow into any type of cell in the body, they function as the body’s cellular repair shop.

While embryonic stem cells have been the focus of heated nationwide debate since 1998, many scientists have been examining the potential therapeutic possibilities of controversy-free and promising alternatives – adult stem cells and umbilical cord blood stem cells.

Certain types of adult stem cells derived from the bone marrow, notably mesenchymal stem cells (MSCs), appear to have potent anti-inflammatory properties. This occurs even if the cells don’t participate in re-growth of damaged organs, and have been the basis of several successful clinical trials in heart and other diseases. Importantly, the MSCs appear to be well tolerated without any significant serious side effects in the clinical trials to date.

Given this, a new trial has opened investigating whether MSCs will effective for COPD. This is a multicenter, placebo-controlled study to evaluate the safety and efficacy of PROCHYMALTM for the treatment of subjects with moderate to severe COPD. PROCHYMALTM is the company’s trade name for their MSCs. This initial investigation focuses on the safety and possible efficacy of using MSCs for treatment of COPD. Eligible patients will receive 4 infusions of stem cells or of placebo over a four month period. Follow-up will occur over a two year period from the date of the 1st infusion.

The Vermont Lung Center is one of five participating institutions in this study and we’re looking to recruit 15 patients. The minimum qualifications are: 1) Age 40-80 years with a diagnosis of Chronic Obstructive Pulmonary Disease; 2) Have a current or former smoking history; 3) have no other significant lung diseases including asthma, lung cancer, pulmonary fibrosis, or tuberculosis. If you are interested or have any further questions, please call Dan Weiss at 656-8925 or Stephanie Burns at 847-2103. You can also read about the trial on the FDA’s website www.clinicaltrials.gov.

You may come across uses of stem cells for treatment of COPD originating from Tijuana, Buenos Aires, or other locations. Please DO NOT participate in these or any other trial that has not been approved by the FDA and is not being run by an accredited university or medical center. We will keep you informed about legitimate trials using stem cells when they occur.
List of Current VLC Studies

**ASTHMA**

**Study of Acid Reflux in Children with Asthma (SARCA)**
Primary Investigator: Charles Irvin, Ph.D., Director, Vermont Lung Center
Coordinator: Stephanie Burns
Who: Children age 6-17 with asthma who do not have heartburn
What: 9 visits over 7 months
Compensation: up to $550

**Study of the Impact of Body Mass Index on Asthma**
Primary Investigator: Anne Dixon, M.D., Director of Clinical Research
Coordinator: Laurianne Griffes
Who: Premenopausal women with asthma and without asthma who have a Body Mass Index of 35-50
What: 1 to 2 visits
Compensation: up to $75

**Weight Loss and Asthma**
Primary Investigator: Anne Dixon, M.D., Director of Clinical Research
Coordinator: Laurianne Griffes
Who: People with asthma and without asthma undergoing gastric bypass or laparoscopic banding surgery
What: Asthmatics- 10 visits over 12 months; Non-Asthmatics- 4 visits over 12 months
Compensation: up to $775 for asthmatics, up to $250 for people without asthma

**Asthma Exacerbations: Physiology, Upper Airway and Fibrin**
Primary Investigator: Charles Irvin, Ph.D., Director, Vermont Lung Center
Coordinator: Sherburn Lang
Who: People with stable asthma and people without asthma
What: 2 Visits, each lasting about 3 hours
Compensation: up to $225

**Forced Oscillation Mechanics in Mild Asthmatics**
Primary Investigator: Lennart K.A. Lundblad, Ph.D.
Coordinator: Sherburn Lang
Who: People with mild asthma and people without asthma
What: 3 visits
Compensation: up to $15

**Role of Leukotrienes and Adenosine in Hyperpnea-Induced Bronchospasm Determined by Dynamic Analysis of Exhaled Breath Condensate**
Primary Investigator: John Morrison, D.O.
Coordinator: Joan Lippmann
Who: People with physician-diagnosed Exercise-Induced Asthma
What: 2 visits
Compensation: up to $100

**CYSTIC FIBROSIS**

**Comparison of Standard Tobramycin Inhalation Solution to the new Experimental Tobramycin Inhalation Powder in Cystic Fibrosis**
Primary Investigator: Thomas Lahiri, M.D.; Laurie Whittaker, M.D.
Coordinator: Stephanie Burns
Who: People with Cystic Fibrosis
What: 9 visits
Compensation: up to $340

**CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)**

**A Phase II, Multicenter, Randomized, Double-blind, Placebo-controlled study to Evaluate the Safety and Efficacy of PROCHYMAL (ex vivo cultured adult human mesenchymal stem cells) Intravenous Infusion for the Treatment of Subjects with Moderate to Severe Chronic Obstructive Pulmonary Disease (COPD)**
Primary Investigator: Daniel J. Weiss, M.D., Ph.D.
Coordinator: Stephanie Burns
Who: Men and Women 40-80 years of age with moderate to severe COPD
What: 9 visits over 25 months
Compensation: $50 per visit

**IDIOPATHIC PULMONARY FIBROSIS (IPF)**

**Effects of Bosentan on Morbidity and Mortality in Patients with Idiopathic Pulmonary Fibrosis - a Multi Center, Double-Blind, Randomized, Placebo-Controlled, Parallel Group, Event-Driven, Group Sequential, Phase III Study.**
Primary Investigator: Gerald Davis, M.D.
Coordinator: Joan Lippmann
Who: People with idiopathic Pulmonary Fibrosis
What: 2 visits within 4 weeks, then every 4 months visits and monthly laboratory tests.
Compensation: Travel reimbursement for travel of 20 or more miles.

For more information on these studies, please visit our website @ www.vermontlung.org

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**Ask Dr. Charlie**

Charles G. Irvin, PhD

**What the warning signs of an asthma attack?**
There are numerous signs but some of the more important and obvious are: 1.) wheezing both breathing in and out, 2.) coughing that will not stop, 3.) chest and neck muscle tightening 4.) difficulty talking.

**I was given an asthma inhaler by my doctor but it doesn't stop my wheezing. Am I using it wrong?**
Inhalers especially the meter dose type (liquid type in a small tin canister) are frequently not used properly. Review the use of all your asthma medications with each visit to a health care provider.
Fish oils are also beneficial to the cardiovascular system. Unlike saturated fats, fish oils protect against heart disease rather than contribute to its development. Omega-3 fatty acids can lower cholesterol levels and blood pressure, and they prevent blood clots. Research shows that fish oils may also prevent abnormal heart rhythms, sudden death from heart attack, and strokes. The American Heart Association recommends the consumption of 1 gram of fish oil daily, preferably by eating fish, for patients with heart disease. The US National Institutes of Health also recommends fish oil for high triglycerides (a type of fat in the blood), prevention of cardiovascular disease, and high blood pressure.

In addition to its positive effects on the brain and cardiovascular health, fish oil has also been shown to reduce pain and inflammation. It is effective in helping to ease the pain of arthritis and colitis (inflammation of the colon), and fish oil supplements may reduce the need for pain medications in patients who suffer from inflammatory conditions. Some evidence also suggests that fish oils might help to prevent or delay the development of breast and colon cancer.

The Vermont Lung Center is supported in part by the following organizations:

- American Lung Association
- ACRC Network
- National Institutes of Health
- National Center for Research Resources

Fish Oil Renee Stapleton, M.D.

Fish oils have recently attracted much attention for the health benefits attributed to the omega-3 fatty acids they contain. These omega-3 fats are eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). They are essential fatty acids, meaning that humans must consume them because we cannot make them in our bodies. We can ingest fish oil either by eating fish high in omega-3 fats or by taking supplements.

EPA and DHA work to counteract inflammation throughout the body. They have been shown to help in a variety of illnesses including cardiovascular disease, high blood pressure, high triglycerides, and arthritis. Despite the long list of positive effects from fish oils, the vast majority of people in North America, South America, and some parts of Europe are deficient in omega-3 fatty acids. For this reason, many dietitians and health care providers recommend fish oil supplements.

Fish oils play a role in brain function. Studies have shown that low levels of the omega-3 fatty acids are associated with depression and Alzheimer’s disease. Higher levels of EPA and DHA are also associated with lower rates of depression and suicide. Another study using mice found that a diet high in omega-3 fats helped prevent the development of Parkinson’s disease.

In addition to its positive effects on the brain and cardiovascular health, fish oil has also been shown to reduce pain and inflammation. It is effective in helping to ease the pain of arthritis and colitis (inflammation of the colon), and fish oil supplements may reduce the need for pain medications in patients who suffer from inflammatory conditions. Some evidence also suggests that fish oils might help to prevent or delay the development of breast and colon cancer.

Little is known about the effects of fish oil in lung disease. Researchers at the Vermont Lung Center are currently investigating fish oil to treat critically ill patients with a lung disease called the acute respiratory distress syndrome. Results of this study may lead to a new treatment for this often fatal disease.