

Your Lab Matters

South Bend Medical Foundation

Changes in testing capabilities decreases “one size fits all” prescriptions



Dr. Michael Murray

“In order to practice good medicine, all doctors are going to have to learn more about genetics to provide better care,” said Dr. Michael Murray.

Dr. Murray is on staff at Brigham and Women’s Hospital Harvard Medical School and is an expert in the field of Internal Medicine and Genetics in

the Adult Care World. He spoke on the subject at South Bend Medical Foundation on April 6 as the 27th speaker in the Giordano Lecture series.

best for each of us. Pharmacogenetics will help determine what you’ll respond to,” said Dr. Murray. Using the example of Plavix (Clopidogrel) he explained that there is a big variation in people’s response to the medication in terms of how much of the drug is actually absorbed and activated.

Bristol-Myers Squibb, which has had the patent since 1997 will lose the patent on Plavix in 2011. Dr. Murray theorizes the use of genetic testing will identify those patients able to use the less expensive medication. There will be a big financial impact since Plavix is used by over one million patients.

Dr. Murray believes this will cause changes in the industry, as Plavix affects more than 1 million patients. In addition to Plavix, Dr. Murray also noted that Pharmacogenetics will lead the way to new treatments in areas of hypertension, cholesterol, heart failure, anti-depressants and asthma.

He said that probably within the next ten years, doctors will be sending patients for blood tests to determine the best choice of drug. The changes that are coming will help affect the outcomes of how patients are treated with faster response, and while not solely driven by economics, it will play a factor.

Dr. Tomec explained, “As the genome is explored, discoveries as to causes of disease, new treatments and understanding of current treatments are occurring at an exponential rate.” As an innovative laboratory, striving to provide physicians and hospitals with the most up-to-date testing, South Bend Medical Foundation is committed to learning more about the benefits of pharmacogenetic testing.

“The South Bend Medical Foundation has been actively working on several pharmacogenetics tests using molecular technology and has made them available locally,” said Dr. Deborah Sun, Scientific Director of Clinical Pathology. Currently,

the focus of his lecture was to inform listeners of the importance of human variation in the practice of medicine and the role that pharmacogenetics will play in the future. He pointed out that many drug prescriptions are no longer “one size fits all” and how each person has different reactions to medications. This is where the breakthrough application of pharmacogenetics comes into play and how clinicians will have to acquire additional knowledge on the subject to provide the best possible care for adult patients.

“As the science of pharmacogenetics evolves we will be able to tailor drug therapy to provide treatment to patients that is optimal for their genetic determined response to the drug. The therapeutic effect will be maximized while side effects are kept at a minimum and the recognition of responders and non-responders will not be a trial and error process but based on genetic makeup of the individual. We are now able to help physicians determine the best treatment and dose for patients through genetic testing,” said Dr. Robert Tomec, South Bend Medical Foundation President.

It is Dr. Murray’s view that pharmacogenetics is useful by helping to increase the safety, ethics and cost of prescriptions.

“Drugs prescribed by doctors don’t work the

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On the Road Again, Saving Lives One Mile At A Time...

By the middle of February, South Bend Medical Foundation's brand new bloodmobile was making its presence known as it assisted the blood bank in collecting units from various businesses and communities in and around St. Joseph County. The bloodmobile has a Ford 650 hsp diesel engine which hauls its 40 foot frame, with six donor chairs, two screening rooms and a post donation area.

"Utilizing the bloodmobile expedites the door to donor time and provides a controlled environment for the staff to work," said South Bend Medical Foundation's Manager of Blood Donor Recruitment, Kay Clark-Cox.

The bloodmobile has made stops throughout the state hosting blood drives at hospitals where SBMF provides blood products and will continue to host drives in the future.

If you would like more information about the bloodmobile contact Kay Clark-Cox at 574.234.1157 *1250. For a listing of community blood drives please look at the schedule available by browsing our website, www.GiveBloodNow.com



Phlebotomy Training Dates

Elkhart

Elkhart General Hospital

May 20

September 16

*All sessions begin at
10am Eastern Time.
Contact 574.234.4176
1262 to sign up

South Bend

SBMF Central Lab

July 15

November 11

This training is designed for experienced health care professionals with knowledge in Anatomy and Physiology who want to develop basic phlebotomy skills for blood draws or improve their phlebotomy technique.

New test offers doctors aid in predicting risk for heart attack or stroke

Do you wish there was a simple blood test that could aid you in predicting which patients are at greater risk for heart attack or stroke?

South Bend Medical Foundation is now offering the PLAC test which measures the level of Lp-PLA2, an enzyme highly specific to vascular inflammation and implicated in the formation of rupture-prone plaque.

Currently, the PLAC test is the only FDA cleared blood test that aids in assessing risk of both coronary and ischemic stroke associated with atherosclerosis.

“We are always striving to make the most innovative tests available to our clients so they have the resources to provide the best possible

care for their patients,” said Dr. Robert Tomec, President of South Bend Medical Foundation.

The test should to be used as a management tool in patients at intermediate to high risk for coronary heart disease or ischemic stroke events.

Suitable patients may include those with two or more risk factors, such as family history of cardiovascular disease or hypertension, even if their overall lipid profile looks normal.

If you would like more information about the PLAC test contact your South Bend Medical Foundation marketing representative or contact 1.800.544.0925 ext 1214.

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the Foundation offers Warfarin and UGT1A1 testing and is currently exploring the implementation of CYP2D6 testing.

The Foundation began offering Warfarin testing in 2007, as a way for physicians to test for the sensitivity to the drug Warfarin, more commonly known as Coumadin. This type of lab test identifies patients who metabolize Warfarin at a slower rate than normal. Patients who metabolize the drug at a slower rate will encounter a greater risk of severe bleeding than those who metabolize the drug at what is considered a normal rate. This testing takes some of the guess-work away from doctors, as they will be able to adjust the dosage according to each patient’s lab results.

SBMF also offers another test for the UGT1A1 gene, known for producing the enzyme UDP-glucuronosyltransferase. The enzyme is active in the metabolism of drugs including irinotecan, which is used in metastatic colorectal cancer treatment. Physicians are able to identify patients who may be at risk for an adverse reaction to the drug.

South Bend Medical Foundation is currently exploring a test, which identifies the rate that the

gene CYP2D6 metabolizes medications including dextromethorphan, β -Blockers, antiarrhythmics, antidepressants, and morphine derivatives. The test will determine, based on the sequence of DNA and certain other characteristics of the gene, how patients will respond to the metabolizing of certain medications in terms of unusually slow, unusually rapidly, normally, or not at all. This, again, allows physicians to determine the appropriate drug and dosage for each patient, rather than having a “one size fits all” approach. If you would like more information about the tests that are currently available please contact your marketing representative or call the Foundation at 800.544.0925.

Throughout South Bend Medical Foundation’s nearly 100 years, the Foundation has sponsored 27 Giordano Lectures, named after Alfred S. Giordano, director for 30 years beginning in Dec 1922 and director-emeritus in Dec 1952. According to Dr. Tomec, Dr. Murray’s lecture on genetic testing continues a tradition of past Giordano speakers who have been experts in evolving fields or problems in laboratory medicine.

Redmond joins SBMF as Manager of Cytology



Monica Redmond has spent the last few months becoming acclimated with her new position at South Bend Medical Foundation as the Manager of Cytology.

Monica has over 19 years of clinical lab experience and started her career as a Medical Technologist and has spent the last seven years as an MT.

After completing her Cytology training in 1998, she joined Lancaster General

Hospital in Lancaster, PA as a screening Cytotechnologist. After two years, Monica was promoted to Laboratory Supervisor of Pathology Transcription and Cytology. Most recently, she functioned as the Assistant Manager in the Division of Cytopathology and Molecular Pathology at QDx Pathology in Cranford, NJ.

Monica holds a BS in Medical Technology from the University of Dayton as well as a BS in Cytotechnology from the University of Medicine and Dentistry in New Jersey. She also has an MBA from the University of Phoenix.

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