



Guiding Adolescents, Teens & Young Adults with Diabetes Toward a Healthy Future

Contact us at 773.702.2371 or diabetes@uchospitals.edu
Visit us at www.kovlerdiabetescenter.org to learn more!



There's good news on the diabetes front.

I am pleased to announce Lilly's Law has passed!

On August 4, 2009, Illinois Gov. Pat Quinn signed into law a bill that we helped introduce nearly four years ago. The legislation, Lilly's Law, requires Illinois physicians and other healthcare providers to enroll all infants with diabetes mellitus in the Neonatal Diabetes Registry (www.kovlerdiabetescenter.org/registry). If all babies under a year are enrolled, we can identify those with conditions we may be able to help with medications rather than injections.

We launched the initiative in 2006, after we met Lilly Jaffe, a 9 year old whose life was changed when we took her off insulin and began treating her with pills. The benefit to patients we can help this way is obviously enormous.

We were able to help Lilly because we knew the genetic makeup of her particular type of diabetes. With this knowledge, we could target her treatment genetically, and change her life.

These are the kinds of things we're working on in the Kovler Diabetes Center. In fact, we have a new Lewis -Sebring Fellow specifically for diabetes and genetics, **Siri Greeley, MD, PhD**, Pediatrics Instructor in the Department of Medicine. He is also collaborating on a registry for adults that may help them live lives as normal as Lilly's has become. Indeed, we hope someday to help the majority of diabetes patients with genetic intervention. It's very exciting!

We are also excited by the announcement in *US News and World Report* that our adult and pediatric endocrinology programs are among the best in the country. And you can be sure we're working to make them even better everyday.

Sincerely, *LPhilipson*

Louis H. Philipson, MD, PhD
Director, University of Chicago Kovler Diabetes Center
Professor of Medicine and Pediatrics

PS – Don't forget November is American Diabetes Month!



On August 4, Illinois Gov. Pat Quinn signed into law a requirement to medically register children under 12 months who are diagnosed with diabetes.



P2
Group
Therapy

P3
Islet
Transplants

P4
Pediatric
Progress

P5
Improving
Outcomes

P6
Family
Support



We're in new digs

Diabetes research moves into the Knapp Center

After more than three years of planning and construction, research activities in the Kovler Diabetes Center have been centralized in the Gwen and Jules Knapp Center for Biomedical Discovery. Kovler researchers now use a new 27,000 square foot state-of-the-art research and office space.

You should see it. Planners literally sat down and made a list of what would go into a world class, cutting edge research center. And then we built it.

The facility is the new go-to diabetes research resource on campus; all investigators doing research related to diabetes will be referred here.

Outside the University of Chicago's research enterprise, it is also considered a diabetes destination. In the first couple of months after we moved, visitors from around the world came calling. People want to see our facility and they want to collaborate with us.

That's the best thing about the new space: the collaboration that's taking place. Not only are our researchers in close proximity to each other, they are surrounded by cancer, gastrointestinal, pediatric and genomics researchers in the building. At Kovler we've always been multi-disciplinary; moving into the Knapp Center exponentially increases our interaction with others.

Among the features of the space are high technology microscopes, black rooms for imaging, a laboratory specifically designed for radioactive work and beautiful, spacious lab benches.

It's inspiring. Our work to translate research into new therapies for patients is ever more attainable. I look forward to keeping you informed of our progress.

Best regards,

Christopher J. Rhodes, PhD
Research Director, The Kovler Diabetes Center
Chair, Committee on Molecular Metabolism



Biomedical science partners Gwen and Jules Knapp

In 2006, Gwen and Jules Knapp donated \$25 million toward the construction of the Gwen and Jules Knapp Center for Biomedical Discovery. It was the Knapp's second multi-million-dollar gift to biomedical research at the University of Chicago.

"We have hope that in our children's lifetimes some of these diseases will be defeated, or their treatments will improve the quality of people's lives We hope that our gifts will advance science and health and benefit mankind."

— Gwen and Jules Knapp

In 1991, they donated \$10 million to establish the Gwen Knapp Center for Lupus and Immunology Research, which is housed in the Jules F. Knapp Research Center, a five-story research facility. They also support the Gwen Knapp Symposium, an annual conference for researchers interested in lupus, and the Joy Faith Knapp Memorial Lecture on autoimmune disease.

It is all part of the Knapp's commitment to helping revolutionize understanding and treatment of the most devastating human diseases. Researchers in the \$244 million, 330,760-square-foot, 10-story, state-of-the-art facility will work at the interface between basic science and medicine. They will translate fundamental scientific discoveries made by biologists and other scientists into better care for patients.

KDC Spotlight

A conversation with Kovler's Executive Director



Peggy Hasenauer is Executive Director of the University of Chicago Kovler Diabetes Center. On board since the establishment of Kovler in 2006, she sat for a chat with Kovler Connection.

Q: Kovler Diabetes Center is obviously dedicated to diabetes treatment. What distinguishes our program from others?

A: We are, very simply, providing the best care, education and clinical research opportunities for individuals with diabetes throughout the lifespan. In addition, we are focusing on leading scientific research that will lead to a cure, more effective treatment, and improved care for individuals with diabetes.

Q: Sounds extensive ... and expensive. How do you support it?

A: We benefit from private gifts and donations, which allow the Kovler Diabetes Center the most flexibility in leveraging new clinical and research opportunities. Individual donors can also decide how a gift will be utilized, especially if they have a special interest in one of our new research initiatives or clinical programs.



Some support our amazing research. Drs. Lou Philipson and Graeme Bell, for example, are finding the genes that cause diabetes. Dr. Philipson has an incredible new lab in our Knapp Center space. He has a top-notch team. They're making great progress. We are also grateful for additional support we receive through foundations and grant opportunities.

Q: Within the discussion of health care in America, how does Kovler improve patient care?

A: For a while now at the University of Chicago, there has been a focus on "translating" scientific discoveries into treatment for patients. The two entities – laboratory research and clinical care – have merged in a new sense, and the trajectory of bio-medical science and its relationship to clinical care has grown more direct.

We are focused on a cure for diabetes and innovative treatment, but we also want to offer the best treatment for people with diabetes now.

Breaking News

The NIH funds clinical trial for novel insulin delivery-glucose monitoring system

Just in time for Thanksgiving, the National Institutes of Health has awarded funding to a Kovler team of physician-researchers studying an "artificial pancreas."

The study, a partnership between Kovler, the University of Illinois at Chicago and the Illinois Institute of Technology, examines how well a novel continuous glucose monitoring/insulin infusion system works in patients aged 18 and older. Called an "artificial pancreas" because it evaluates insulin and glucose levels and signals a pump to provide more insulin when needed; the system is unique because it also evaluates the effects of metabolism.

"There are other closed-loop pumps with CGMS," explains Dr. Elizabeth Littlejohn, Associate Director of Kovler and Assistant Professor in endocrinology and pediatrics and an investigator in the clinical trial. "But none have been able to analyze metabolic effects on this system, such as when a person is exercising vs doing normal day-to-day activities – and incorporates this data into the system."

"It synthesizes the metabolic data with the blood sugar data, and tells the insulin pump what to do. The patient does nothing. This is new because the patient used to have to anticipate then input the data," says Dr. Littlejohn. "Now it's being done for them."

The NIH award will enable the researchers to continue a pilot study of the system, which was originally funded through the University of Chicago's Diabetes Research and Training Center.

Current Clinical Trials

Clinical trials, the point in research when physicians team with patients to test new therapies, are a vital and ongoing function of advancing medical understanding and treatment. Many of the trials based in the Kovler Diabetes Center hold great promise for patients dealing with diabetes and obesity and their side-effects. Investigators rely on patient participation, and seek those who have an interest in and may qualify for enrollment in a study. If **you or someone you know** are interested in participating in a clinical trial, talk to your physician.

Trials currently underway in the Kovler Diabetes Center:

1. DEFEND1

Funding ToleRx

Enrolling Generally healthy individuals between the ages of 18-35 with a confirmed diagnosis of T1DM may be eligible. In order to participate in DEFEND1, a subject must:

- Be 18 to 35 years of age
- Have new-onset Type 1 (autoimmune) diabetes (consistent with ADA/WHO criteria) that requires insulin treatment
- Have been diagnosed within 90 days of receiving the first dose of study drug
- Have a screening stimulated C-peptide level > 0.20 nmol/L during an oral mixed-meal tolerance test when pre-challenge blood glucose is > 70 mg/dL and ≤ 200 mg/dL
- Have a maximum stimulated C-peptide level ≤ 3.50 nmol/L during screening
- Have a positive test result for anti-GAD and/or anti-IA-2 autoantibodies
- Not be pregnant, breastfeeding, or planning to become pregnant within the 60 days after the last dose of study drug
- Have a Body Mass Index (BMI) of < 32
- Require insulin
- Have no other significant medical illnesses

Purpose To assess the efficacy and safety of oteelixumab, an anti-CD3 monoclonal antibody also referred to as TRX4

Contact Kovler Diabetes Center,
(773) 702-2371, diabetes@uchospitals.edu,
www.DefendAgainstDiabetes.com/refer

2. CLINICAL TRIAL ON ISLET TRANSPLANTS

Funding State of Illinois

Enrolling Initial selection criteria include:

- Must be between the ages of 18 and 58
 - Must have been diabetic (Type 1) for the last 5 years
 - Must be on an a regimen of glucose monitoring and insulin injections
 - Must be available for clinic visits for the duration of the study
 - Must meet study medical criteria as evaluated by Dr. Millis
- You are not eligible to be involved in the study if:
- You do not meet the above criteria
 - You do not meet the required height/weight ratio
 - You do not have good kidney and liver function
 - You have had a prior transplant
 - Participants in this trial will be followed for five full years.

Purpose As part of our initial trial, we plan to give 10 patients islet transplants and follow them for five years to see how well they do. Five of these 10 patients have already received islet transplants and are doing well. We hope our findings will provide information on the procedure's safety and success, as well as form the basis for additional trials in which more subjects with diabetes can be enrolled. Similar studies are being conducted around the world.

Contact Islet Cell Transplant Program Coordinator,
Kathleen Singraber, RN, ksingrab@surgery.bsd.uchicago.edu
or (773) 702-2504. Questionnaires to help determine if you are a candidate for this study are available.

Check it out

A new clinical trial for teens and young adults looks at diabetes and insulin resistance

A new study has just begun in the Kovler Diabetes Center for people aged 13-25 with diabetes. It will measure insulin resistance and other factors that can affect the risk of complications.

Led by Principal Investigator, Rebecca Lipton, RN, PhD, the trial is currently seeking volunteers.

To be eligible, young people living with diabetes must:

- be 13 - 25 years old
- have had diabetes for at least two years
- have been diagnosed before age 18
- be treated with insulin and/or pills

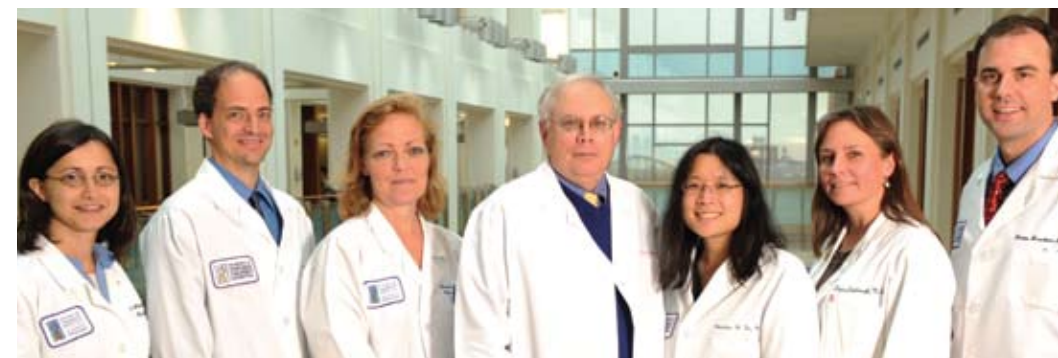
Taking part in the study is voluntary, and does not affect medical care. For more details, contact: Latrisha Hampton, RN, Study Coordinator, 773-834-8312, lhampton@peds.bsd.uchicago.edu

Kid Time

Kovler pediatric diabetes program a national model

Consider the challenges of treating an 18-month-old child for diabetes. Dr. Elizabeth Littlejohn has. She recently inserted an insulin pump under the skin of a toddler and vastly improved the quality of life within the household.

An expert in pediatric diabetes and Assistant Professor in endocrinology and pediatrics, Dr. Littlejohn works with patients ranging in age from neonatal to 20-years old, the range most associated with pediatric medicine. She was named Associate Director of the Kovler Diabetes Center a year ago, demonstrating Kovler's commitment to advancing treatment for young patients.



"Kids have a different physiology than adults," Dr. Littlejohn says. "They are a different population. We have to treat them in ways that are safe in the pediatric population. And that means we need to study that population."

This focus is part of the thinking behind diabetes treatment at Kovler Diabetes Center. A national model for diabetes care, the Kovler approach, "follows the continuum of disease in the lifespan," explains Dr. Dianne Deplewski, Associate Professor in pediatrics in the section of endocrinology. Physicians,

educators and researchers focus on infants adults, seniors, and everything in between. They modify their approach according to the profile of each individual in order to make treatment as effective as possible.

Toward that end, Dr. Littlejohn and others have begun clinical trials for children with the hope they can understand how to treat pediatric patients better. Three new trials are nearing IRB approval, considered the final hurdle before the study begins.

Studies such as these have been ongoing internationally, Dr. Littlejohn says, but the University of



Another way Kovler can help where others can't is through unique programs for diabetes patients outside the clinic. For example, Kovler provides a transitions program for teens learning to manage diabetes. There's a new program designed to support the family, and, as a routine part of treatment, Kovler offers counseling and education programs, social workers and ancillary support facilities for all ages.

"We look at all aspects of diabetes, not just one model," says Dr. Littlejohn. "This is important from a research standpoint.

Now we have a chance to bring the scientific side of diabetes to kids."

And the scientific side only leads to better understanding, which leads to better care. "Our research efforts imply we can change the way diabetes is thought about and treated," says Dr. Deplewski. "We can't get everyone off insulin, but we have been able to do a lot. The more we can learn, the more we can improve medicine and therapies for everyone."

Chicago has not participated until now. "Kovler has helped facilitate these new directions," she says. One way Kovler has helped is through its network of investigators and doctors from the entire range of areas in the University of Chicago Medical Center. With these vast resources, "Basic science personnel are on the front line to translate their work into patient care," Dr. Deplewski explains. "I don't need to go through a third party. There's a lot of collaboration. And because our program is so big, and takes many kinds of cases, we can help when others can't."

Family Support

Kovler backs a model program to engage the entire family in diabetes management



Chronic conditions take their toll. Not only do the emotional, logistical, physical and interpersonal aspects affect the individual with the illness, they impact every relationship the patient has. A look in the worried face of a loved one reveals that fact. Studies have proven it.

And now the University of Chicago and Kovler Diabetes Center are establishing a model program to support families as they face diabetes.

“There is substantial evidence that healthy family functioning improves adherence to diabetes treatment, and thereby the course of the illness,” says Dr. John Rolland, Co-founder of the Chicago Center for Family Health. “Research shows that a family-sensitive psychosocial component to health care reduces costs and increases family well being.”

The mission and purpose of the Kovler program is to implement a unique bio-psycho-social approach to the management of diabetes. The first ever comprehensive diabetes program, it would serve as a national and international model for care management of other major chronic illnesses, as well as diabetes. Key elements will be to include the family in care and to address diabetes-related family stresses and concerns.



The program will also emphasize an individual and family lifespan model to address challenges over the course of diabetes. A full collaboration between biomedical and psychosocial providers of care and families coping with diabetes will underlie the process.

As a model for this approach to care, the program will advocate fuller integration of the biomedical and psychosocial aspects of care directly in health care settings. The model will be introduced close to the time of diagnosis.

“The psychosocial aspects of diabetes must be considered when developing a chronic disease management plan,” Rolland says.

Endocrinology programs tops in the country

News from the latest U.S. News & World Report survey

In the 2009 “Best Hospitals” issue of *U.S. News & World Report*, 11 University of Chicago Medical Center specialties were among the top programs in the country.

Our Adult Diabetes & Endocrine Disorders program ranked 14th nationwide, and the Pediatric Diabetes & Endocrine Disorders program ranked 22nd in the country.

Contact us!
773-702-6138

Schedule an appointment,
join our mailing list, and learn
more about the KDC!
773.702.2371
diabetes@uchospitals.edu
www.kovlerdiabetescenter.org

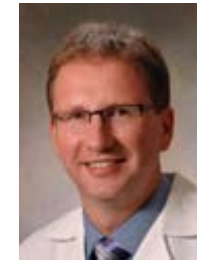
Chicago Childhood Diabetes Registry

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lhampton@
peds.bsd.uchicago.edu

[http://drct.bsd.uchicago.edu/
prevent/childhood.html](http://drct.bsd.uchicago.edu/prevent/childhood.html)

Expert Dr. Piotr Witkowski to lead islet transplant program



Kovler Diabetes Center welcomes Piotr Witkowski, MD, PhD, to the University of Chicago Medical Center. He has been named Director of the Islet Transplant Program and Assistant Professor in Abdominal Transplant. Dr. Witkowski will also serve as a consultant to Kovler.

“Our collaboration with Kovler will help patients who have a possibility of regaining insulin function,” he explains. “I look forward to my partnership there.” He said about 75 percent of his time will be devoted to diabetes.

As part of that, Dr. Witkowski will oversee the establishment of new islet clinical trials. He says his team is poised to build on previous advances and produce translational research very quickly.

“I see this as a great opportunity to continue and expand what’s been done before,” he says. “It’s also a great opportunity for me personally. Not only is it easy to be productive because the team is good, I can combine all the things I love at the same time – surgery, basic science and progress in diabetes treatment. It’s great to be at the University of Chicago.”

Announcing: The new and improved Kovler Diabetes Center website

The Kovler Diabetes Center has launched a new website, with more information and added features to keep you informed.

Check us out: www.kovlerdiabetescenter.org

We welcome your feedback! Send us an email at diabetes@uchospitals.edu and share your ideas to improve our new site.



Kovler Calendar

NOVEMBER

November is American Diabetes Month!

The Future of Comprehensive Diabetes Care

Friday, November 13, 2009
The University of Chicago Gleacher Center
450 N Cityfront Plaza Dr., Chicago, IL
8:00pm-3:30pm
This is a professional education event for nurses, dietitians, diabetes educators and other allied health professionals. A total of 6.0 continuing education credits will be offered.

For more information, contact
773-702-2371 or 800-989-6740
diabetes@uchospitals.edu
www.kovlerdiabetescenter.org

DECEMBER

First Annual Comprehensive Review of the Management of Type 2 Diabetes

Saturday, December 12, 2009
Marriott Chicago Downtown
540 North Michigan Avenue, Chicago, IL
8:00am-4:30pm
This is a Medical Education Program for physicians and health care providers. Providers/physicians may earn up to 7.0 AMA PRA Category 1 Credits.

For more information,
email meetingregistration@VindicoMedEd.com
or call 877-307-5225, ext. 219 or 476.
Register online at www.vindicomeded.com/meetings/diabetes.

MARCH

Fourth Annual Living Well With Diabetes

Saturday, March 6, 2010
The University of Chicago Medical Center
This is a free educational event for individuals with diabetes and loved ones.
Check out our website for more details at www.kovlerdiabetescenter.org.

APRIL

ADA Diabetes Expo

Saturday, April 10, 2010
Navy pier
Visit the KDC booth.

For more info go to www.diabetes.org.
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