While bipolar disorder is rarely diagnosed in children before puberty, doctors are now finding that children as young as age 7 can have the disorder.

In many cases, bipolar disorder in young children can resemble the worst form of illness as it manifests in adults. Typically, it is not episodic, but is instead often chronic and features both mania and depression at the same time (mixed mania), with marked irritability and extreme, protracted, temper tantrums. These children will often be ill for years without having periods of wellness, and will frequently have multiple daily mood swings of highs and lows.

Children with prepubertal bipolar disorder may also suffer from attention deficit/hyperactivity disorder, which means clinicians often have to determine whether both problems exist. Both disorders share some common symptoms – hyperactivity, distractibility, and short attention span. To distinguish the two disorders and conclude whether just one or both of them are present in the same patient can be very challenging due to their similarities, and because some typical features of mania such as euphoria and grandiosity, as well as clear cut onset and offset of episodes, may be rare in children. This can make it difficult for

**Antidepressants usually need to be taken 2-3 weeks before any obvious improvement in a patient’s depression is seen. There are a few strategies that could possibly accelerate this response; which strategy is best is still under investigation. One approach is to add small doses of thyroid hormone, which regulates metabolism, when a person starts treatment with an antidepressant. The mechanism by which thyroid hormones may speed antidepressant response is unknown, but studies on animals suggest that one of the thyroid hormones, T3 (known as Cytomel), has an influence on norepinephrine and serotonin (both are brain chemicals)**
doctors to recognize bipolar disorder. When both disorders are present, another challenging task is the treatment. In the case of attention deficit/hyperactivity disorder, the standard medication includes psychostimulants, which raises a concern about these drugs’ potential for inducing mania in children with bipolar disorder. Limited clinical experience thus far suggests that psychostimulants in combination with one or more mood stabilizers taken for bipolar disorder may be safe and effective and may result in the therapeutic improvement of attention deficit/hyperactivity disorder symptoms without inducing or worsening mania. The MDRP studied bipolar adolescents with mania to assess whether those with or without ADHD responded to either lithium or divalproex sodium (another type of mood stabilizer). In a group of 42 bipolar adolescents, those who also had ADHD showed a lower rate of mania improvement regardless of the drug given, i.e. lithium or divalproex sodium, than patients without ADHD. This finding suggests that both lithium and divalproex sodium are effective in treating acute mania, but adolescents with mania and concomitant ADHD have a reduced response to standard antimanic agents. More research on treating this complex combination of disorders is needed and will be a future direction for the MDRP.

Modafinil (Provigil®) is currently approved for use in the US by the Food and Drug Administration for daytime sedation and somnolence associated with narcolepsy (a genetic sleep disorder) and obstructive sleep apnea (periods at night where people stop breathing). It is also approved for use in people with sleepiness and fatigue because they work different and changing shifts.

Knowing that sleepiness and fatigue are common symptoms in bipolar depression, and that medications can have these side effects, MDRP conducted a study in collaboration with researchers at the University of Cincinnati, University of Texas in Dallas, Universities of Munich and Freiburg in Germany, and the National Institute of Mental Health to evaluate the effectiveness and safety of modafinil in the treatment of bipolar depression.

The study, spearheaded by Mark Frye, M.D., director of the MDRP’s Bipolar Disorder Research Program, was a 6-week, randomized, double-blind, placebo-controlled evaluation of modafinil in subjects with bipolar depression. To participate in the study, subjects had to be bipolar, depressed, on mood stabilizers and otherwise healthy. The average dose of modafinil was 177 mg each day.

Although the exact mechanism by which modafinil works is unknown, subjects given the drug had a significantly greater reduction in fatigue and depressive symptoms than those given a placebo. The most common side effect reported was headache: 12.3% of modafinil patients and 2.3% of placebo patients.

The data suggests that use of modafinil at 100-200 mg daily in conjunction with other mood stabilizers may improve depressive symptoms in bipolar disorder.

Although it could be years before modafinil is FDA approved for bipolar depression, the data should help clinicians feel more comfortable prescribing modafinil for patients with bipolar disorder who suffer from sleepiness and fatigue.
DONOR ENDOWS FIRST CHAIR IN MOOD DISORDERS FOR UCLA DEPARTMENT OF PSYCHIATRY

Julia S. Gouw, Chief Financial Officer of East West Bank and a noted philanthropist, has endowed the first Chair in Mood Disorders for UCLA’s Department of Psychiatry.

The $1 million endowment will provide up to $50,000 annually in highly coveted unrestricted funds to support and expand research on mood disorders such as bipolar disorder and depression.

Ms. Gouw became interested in supporting mood disorders research after a family member developed a manic episode. With no prior knowledge of the resources available to treat mental illnesses, Ms. Gouw used the internet to research hospitals in Los Angeles. Impressed with the facilities at UCLA, she contacted the hospital where her relative was admitted and treated for a manic episode.

Soon afterwards, Ms. Gouw’s relative developed depressive symptoms, which were more difficult to treat. Transferred to the care of Dr. Altshuler, the patient’s mood was stabilized and the patient continues to do well in the five years since then. Out of gratitude for the excellent care that her relative had received and motivated to advance the understanding and treatment of bipolar disorder and other mood disorders, Ms. Gouw made the remarkable decision to provide the department with an endowment.

“I was touched by Julia’s desire to endow a chair in mood disorders research and honored by my department’s decision to approve my being the recipient,” Dr. Altshuler said. “Chairs like this infuse the program with additional financial resources to allow progress to be made and explorations to be undertaken in new directions of mood disorders research.”

Ms. Gouw, who was recently named one of the 25 most powerful women in banking, has been the Chief Financial Officer of East West Bank since 1994. She joined East West Bank in 1989 as a controller and since then has been instrumental in bringing the institution public during a $238 million management sell out in 1998. During her tenure as CFO, the 38-branch bank has grown to $3.6 billion in total assets from $400 million while net earnings have grown to $50 million from $1 million. Thirteen division heads at the bank report to her and she has overall responsibility for finance, administration, and operations.

In March 2004, Ms. Gouw was named the first philanthropist of the year from the United Way’s Women’s Leaders for Giving and the National Association of Women Business owners in Los Angeles.

ENDOW Continued on Page 4
In addition to setting up the UCLA endowment, Ms. Gouw has helped found the Executive Advisory Board for the Mood Disorders Research Program. The board, which currently has about 10 members, is “another way of getting people involved and raising unrestricted funds for the mood disorders research program,” Ms. Gouw said.

Members of the executive advisory board, which Ms. Gouw hopes will ultimately grow to 35 members, have pledged $10,000 annually for three years to the Mood Disorders Research Program.

“The advantage of unrestricted funds is that they can be used wherever the current need is the greatest, and the needs are ever shifting as grant funding begins and ends throughout the year on different projects, whether or not the project is completed,” Dr. Altshuler said. “Unrestricted funds give us the discretion to use monies in a way that is most meaningful to complete specific projects or to provide seed money for new projects.”

Dr. Altshuler has served as director of the Mood Disorders Research Program at UCLA since 1995. During her tenure, the program has grown to include more than 25 studies, all striving to better understand the causes of bipolar illness and depression, and to advance treatment options by assessing the efficacy of new treatments for these disorders.

Dr. Altshuler also runs the Women’s Research Program, which aims to develop treatments for women with mood disorders during specific life phases such as pregnancy, the postpartum, perimenopause, and menopause.

Both research programs work cooperatively with UCLA’s Mood Disorders Clinic and the Women’s Life Center, sharing treatment innovations with doctors and patients.
 Turnbull

The Mood Disorders Research Program (MDRP), directed by Lori Altshuler, M.D. is devoted to better understanding the causes and treatment of both bipolar disorder and unipolar depressive disorder. MDRP receives funding from private sponsors and the National Institute of Mental Health to use neuroimaging techniques (MRI) to look at brain structure and function in patients during episodes of mania and depression, as well as during times of recovery. The program also has ongoing studies to look at the optimal treatments for mania and depression. The nationally recognized Women’s Research Program is also part of the MDRP. Studies include issues relevant to women and mood, including the optimal ways to treat women who suffer from depression during specific life phases such as pregnancy, postpartum, peri-menopause and menopause. Research results from this program have been reported in the New York Times and featured on CNN.

Women of childbearing age who suffer from bipolar disorder have a higher rate of endocrine abnormalities, regardless of drug treatments, according to a new UCLA study published this year.

In a study conducted by the MDRP and involving several sites in the U.S. and abroad, 72 women ages 18-45 who were not taking oral contraceptives completed questionnaires about their menstrual cycles and gave blood samples for measurement of their reproductive endocrine and metabolic hormone levels.

The study found that many hormone levels were abnormal. A significantly higher proportion of the women taking the mood stabilizer Depakote had abnormal ratios of luteinizing hormone to follicle-stimulating hormone and abnormal menstrual cycles. The study, however, did not find elevated levels of the hormone testosterone, a marker for polycystic ovary syndrome.

Dr. Altshuler and her research team concluded that many bipolar women have medication-related endocrine abnormalities, which may contribute to the high rate of menstrual disturbance reported in this group.
Founded in 1995, the UCLA Mood Disorders Research Program at The David Geffen School of Medicine is a non-profit program dedicated to research. Working in tandem with the Department of Psychiatry’s renowned Mood Disorders Clinic and Women’s Life Center, our researchers often work with patients in the clinics. Although we receive grant funding, private contributions are essential to our program’s health and growth in new directions. Individuals interested in making a donation to support the program are asked to make the check payable to The UCLA Foundation and send it to:

**UCLA Mood Disorders Research Program**
300 UCLA Medical Plaza, Suite 1544
Box 957057
Los Angeles, California 90095-7057

Individuals interested in making a planned or major gift should contact Alan Han, Senior Associate Director of Development for Neuroscience at (310) 825-1546 or by email: ahan@support.ucla.edu.