



CONCORDANCE v.3 no.2

the newsletter of

Research into the Causes of Schizophrenia and Bipolar Disorder

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Why volunteer for research?

We recently asked some of the family members who have participated in our study to write us explaining why they chose to volunteer, and to describe their experience. Here's a sampling of some of their responses. We would like to thank each of these individuals for their contributions. (All of the individuals below agreed to the use of their names, but to better protect confidentiality, we have used only initials).

"Mental illness no longer means that a loved one is locked away and their family is left to suffer a stigma of shame and ignorance. Through the research efforts of Dr. Nimgaonkar and the University of Pittsburgh, genetic markers may be identified to help families that may develop mental illnesses. Family group participation is essential for this project to succeed. My family, children as well as grandparents, have been working with this project for several months now. We feel that this research will have great benefit for the future generations. Through the efforts of Dr. Nimgaonkar and his staff and further research in genetic therapy, there may some day be a cure." ~R. H. West Virginia

"Twenty two years ago my son was diagnosed with Schizophrenia. The next years were agony mixed with frustration, fear, and hopelessness. Now, at age 40, he is well adjusted. I hope the current efforts, through genetic studies, to avoid any family having to go through what our family endured, go forth till many questions are answered. I hope also that individuals with the diagnosis of schizophrenia can have a happier life with a meaningful spot in society. Research can't just end in the laboratories—it has to place individuals into a satisfactory lifestyle" ~V. M., Pennsylvania.

"I hope that the DNA study can continue so that we may find medical cures to mental illnesses. I could better the lives of millions of people." S.M., Pennsylvania

The thing that stands out in my mind the most is that Donna, who interviewed me, made me feel comfortable with her questioning, and furthermore, did not ask any embarrassing or unsettling questions. The duration of the interview went smoothly; it was an easy process and I was made to feel at ease. I am all for advancing research, and I hope my answers shed some light where once there was only darkness." K. B., Ohio

"My son and I recently participated in the University of Pittsburgh research study. A staff interviewer came to our home at our convenience to conduct an interview, followed by a blood draw. My family found this experience to be pleasant and professional and would encourage all concerned to participate in this study, so that some day the devastation of Mental Illness will no longer exist." ~C. B. Indiana

A note from Seoul, South Korea from Yu-Sang Lee, MD Over the past year, Dr. Yu-Sang Lee, a psychiatrist from Seoul, South Korea, worked as a member of Dr. Nimgaonkar's research team, and helped to initiate an ongoing and productive collaboration between our group in the U.S. and a group of psychiatrists in Seoul. Dr Lee traveled here with his wife and two young sons. After his recent return home, he sent us this note for *Concordance*: **"The knowledge, which I got from Dr. Nimgaonkar's team, will be very helpful in studying genetics of psychiatric illnesses in Korea. Korean scientists are diligent and are eager to study genetics of psychiatric illnesses. Old and inefficient systems have not gotten the research done well in the past, but these problems will be overcome in the near future. I hope the genetic causes of psychiatric illnesses are clarified and many patients who are suffering from the illness are relieved from their pain. Also, I hope the co-work between Dr. Nimgaonkar's team and my Korean colleagues' research group elucidates the etiology of major psychiatric illnesses. Again, I really appreciate Dr. Nimgaonkar and his team's consideration and warmth to my family." Yu-Sang Lee, MD**

Join the growing number of families who have helped—in the U.S. and India

by Patrick Reitz, Project Coordinator

	Type of Family			TOTAL
	Two or more Affected Siblings	1 Affected Person & 2 Parents	1 Affected Person & 1 Parent	
Schizophrenia—USA	59	93	172	
Schizophrenia—India	87	172	28	
Bipolar Disorder—USA	7	37	63	
TOTAL	153	302	263	718

As the above table shows, our combined research staff in the United States and New Delhi, India, has completed work with a total of 718 families who have generously volunteered their time to promote our understanding of schizophrenia & bipolar disorder. Worldwide, schizophrenia and bipolar disorder each affect an average of 1% of the population of any given country or culture. Appropriately, the effort to defeat these illnesses has become international in scope. **If you can count yourself among the families who have volunteered, we cannot thank you enough!** To provide even greater power to our laboratory work, we are striving to include several hundred more families into our study. We are always happy to hear from new families interested in participating. If you would like to participate, or learn more about our study, please call us toll free at 1 - 877 - 363 - 5895.

A summary of our recent lab work and other studies

By Vishwajit L. Nimgaonkar, MD, PhD

GENETIC ANALYSIS FOR SCHIZOPHRENIA IN FULL SWING

Now that over 300 families have participated in the USA and a similar number have participated in the Indian arm of our studies at New Delhi, laboratory analysis of DNA samples is in full swing. We are using two approaches. First, we are investigating genes other researchers think may be involved in the onset of schizophrenia. As part of this analysis, we have investigated the genes coding for the following proteins: cytosolic phospholipase A2, dopamine D3 receptor, dopamine transporter (DAT), Serotonin2A receptor (HT2A), Tryptophan Hydroxylase (TPH), Catechol-o-methyl transferase (COMT), hSKCa3, NOTCH4 and three mitochondrial genes.

Thus far, we have been unable to support the claims of other groups. In the second series of analyses, we are systematically analyzing genes located on specific chromosomes. At present, we are focusing on the short arm of chromosome 6 and the long arm of chromosome 13 because previous analyses by other researchers suggest that genetic susceptibility factors may be located in these regions.

GENETIC ANALYSIS FOR BIPOLAR DISORDER BEGINS

Over 100 families of patients with bipolar disorder have now participated in our studies. We have started analyzing their DNA samples. Initially, we are analyzing genes involved in the serotonergic system because many researchers believe that variants of one or more of these genes may increase susceptibility for bipolar disorder.

RESEARCH WORK ON SCHIZOPHRENIA PRESENTED IN INDIA

We have compared clinical features of our US patients with those of our Indian patients. We did so because many researchers believe that schizophrenia is less severe and has a more benign course in India. We did not find any strong evidence for such a difference during our analysis. To highlight our findings, we organized a special symposium at the annual meeting of the Indian Psychiatric Society. Our papers led to very productive discussions, but many Indian psychiatrists still believe that patients with schizophrenia fare better in India!

CONTACT US !

Toll free: **1-877-363-5895** (Schizophrenia) / **1-800-994-8182** (Bipolar Disorder).

www.pitt.edu/~nimga/ (schizophrenia) / **www.wpic.pitt.edu/research/neurogen/** (bipolar disorder)

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