CONCORDANCE Vol. 2, Nos. 1 & 2

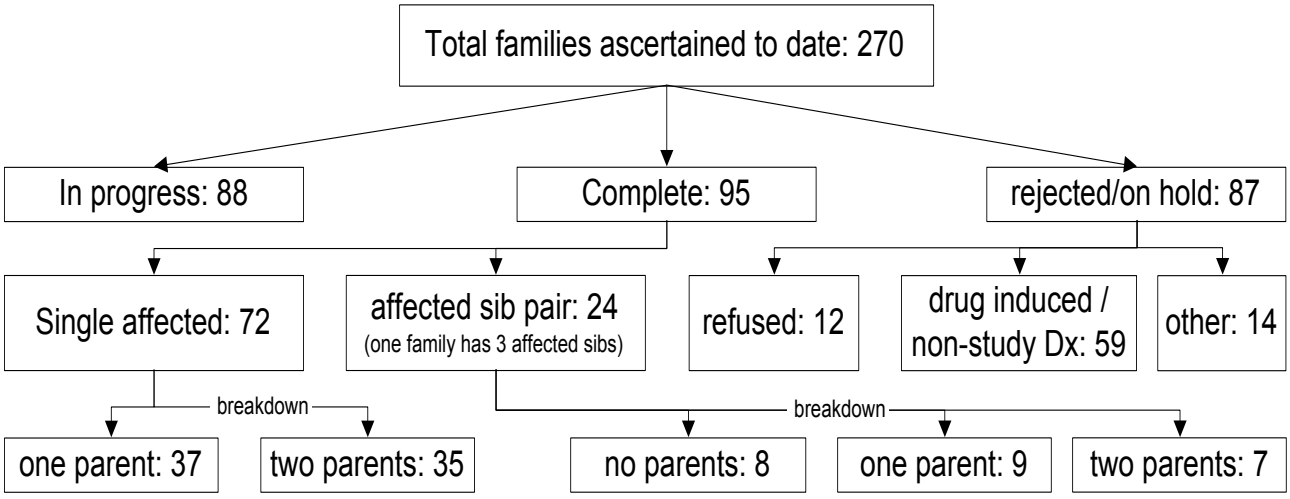
Research into the Causes of Schizophrenia and related illnesses
Western Psychiatric Institute and Clinic -- University of Pittsburgh

This issue of Concordance is a "double issue," which is a sheepish way of saying we're sorry for not getting out an issue in the summer. We've been very busying training new staff and recruiting new families. Please read on for details. *–Patrick Reitz, Project Coordinator*

Progress Report: Families completed

by Joel Wood

The flow chart below illustrates our progress (starting June 1, 1997 to present) recruiting and completing all data collection with families who have volunteered for our study. To date, we have gathered all the clinical information needed on 95 families. Of these 95 families, 24 are in the category of what we call "affected sibling pairs," where at least two siblings in each family are affected with schizophrenia or schizoaffective disorder; an additional 72 families have been completed in which there is one person affected. Of the these 72 families, there were 37 in which one parent participated, and 35 in which both parents paraticipated along with their ill son or daughter.



Our ultimate goal is to obtain participation by 300 families with affected siblings pairs, and an additional 300 families with a single affected person and a parent by the end of the grant period, May 31, 2002. While we currently have 88 families in progress toward completion, we are always in need of more participants. If you or someone you know may be interested in participating, please call us toll free at **1 - 800 - 994 - 8182. If you can count yourself among these families, we can't thank you enough! For eligibility details, please see box on page 2.**

Laboratory analyses just beginning

by K.V. Chowdari, PhD

Many consumers and family members we have met have asked: "*When* are you going to find the genes?" We share your impatience, and wish we could provide the answers immediately. However, working toward those answers will require continued effort in upcoming years to recruit many more families and perform multiple, reliable laboratory analyses aimed at identifying the genes which predispose a person to developing a psychotic illness. With the samples of DNA we have collected from 95 families (see above) we have begun preliminary laboratory analyses. With these procedures we have begun trying to identify differences in the genetic structure of persons affected with psychotic illness versus unaffected persons. The analyses first attempt to demarcate a region of a particular chromosome where a presumed disease gene may be located, and then progressively narrow that region down to the level of individual genes to discover the significant genetic differences between affected and unaffected persons. Our early analyses have focussed on areas of the human genome believed to be involved in the etiology of schizophrenia and other psychotic illnesses. These areas include regions harboring genes affecting neurotransmitter levels (i.e., dopamine and serotonin) and genes involved in the body's autoimmune response (HLA

genes). Thus far our analyses have not ruled out any of these suspected regions. We will need to repeat these analyses (and perform new ones) with much larger samples (serveral hundred subjects) before we can say with confidence that our findings are scientifically significant. The most important factor which will affect our ability to identify the disease genes is the number of families we ultimately are able to collect. Research into complex illnesses that are thought to be caused by several genes (like schizophrenia and bipolar disorder) requires a very large sample of subjects to be successful.

Questions & Answers by Laurie Brar, RN

Q: How long will it take you to find the genes for schizophrenia, schizoaffective disorder or bipolar disorder?

A: The answer to this is simply we do not know. There are several things we do know, however. We know that the causes of these illnesses are complex and may involve more than one gene. Additionally, the ultimate cause of the onset of the illnesses may involve an interaction between one or more genes and an environmental factor (such as exposure to a virus, for example).

Q: How will finding the cause benefit those who suffer from these illnesses?

A: Learning the cause of these illnesses will help us to learn more about the biochemical processes that occur in these individuals. This knowledge will hopefully lead to better treatments, those which can be very specifically targeted to correct these imbalances. Also, as we've heard from many participants, it may be possible that those with these illnesses will feel less stigmatized, as a biological origin for these illnesses is discovered.

NEW STAFF: Goodbye Erin, Hello Kathryn, Jamie, Sr. Suzanne, Susan, and Chowdari!
by Patrick Reitz

Over the past several months, there have been several important staff changes within our group. **Ms. Erin King**, who worked with us for two years as a clinical interviewer, has moved on to a position as a milieu therapist in the WPIC hospital. Though we wish her luck as she moves in this new direction, we are sorry to lose her clinical skills and her warm sense of humor and regard for others.

We are happy to announce the hiring of five new staff. In September two new clinical interviewers came to Pittsburgh for training, and now are back home beginning to recruit families. **Ms. Kathryn Cramer, M.S.W.** lives near Scranton, PA, and will be covering the eastern 1/3 of the state, from Harrisburg east, and from the New York border to Philadelphia. Ms. Cramer has extensive experience as a clinical social worker and great energy; we are pleased to have found her. In Lexington, Kentucky we found **Ms. Jamie Breedlove**, a recent graduate with an eye on becoming a clinical psychologist. Ms. Breedlove has the great responsibility of covering the entire state of Kentucky. Jamie will certainly bring a lot of energy and a positive attitude to the task. Ms. Breedlove will be helped in Kentucky by **Sister Suzanne Chenot**, a Benedictine nun living in the Appalachin community of Neon, KY. Sr. Suzanne, who has been doing community work in Kentucky for several years, will help to publicize the study and recruit families in the southeastern corner of the state. To help with publicity and recruitment nearer to Pittsburgh, we have also recently hired **Ms. Susan Simensky**, a native of Ford City, Pennsylvania. Ms. Simensky is now a paid staff member, after volunteering with us for several months as a recruiter.

Now that laboratory analyses have begun, it is especially important that we have brought **K.V. Chowdari, Ph.D.** to direct our genotyping efforts. Dr. Chowdari was recruited from his home in India to bring his expertise in molecular genetics to bear on our studies. Dr. Chowdari arrived here in early September, and has adapted quite well to our country. We have all been impressed by his knowledge and his work ethic, and we welcome him to the study.

WHO IS ELIGIBLE TO PARTICIPATE IN OUR STUDY?

Individuals with a a diagnosis of schizophrenia, schizoaffective disorder, or bipolar disorder. To be eligible, each person with one of these illnesses must also have other family members willing to participate along with them. These family members can be either:

One or both parents willing to participate (by answering questions and giving a blood sample)

OR

A brother or sister who is also diagnosed with schizophrenia, schizoaffective disorder, or bipolar disorder and willing to participate (by answering questions and giving a blood sample).

CONTACT US! Toll free: 1 - 800 - 994 - 8182 / e mail **nimga+@pitt.edu** / Dr. Nimgaonkar's office (412) 624-0823. On the web: **http://www.pitt.edu/~nimga/** (schizophrenia) OR **www.wpic.pitt.edu/research/neurogen/** (bipolar disorder)