

# CONCORDANCE

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Research into the Causes of Schizophrenia and Bipolar Disorder  
University of Pittsburgh Medical Center

Greetings from Pittsburgh! In this third edition of our newsletter we inform you of some recent progress in the areas of recruitment and analysis. We are now into the 8<sup>th</sup> official month of our 5 year study, and the project is taking shape. We hope you enjoy this newsletter. --Patrick Reitz, Project Coordinator

## Progress Report: Families Recruited

To date, we have completed interviews and collected blood samples from over 80 families in Pennsylvania, West Virginia, and Ohio. We give heartfelt thanks to everyone who has participated in our study thus far, and helped us to such a good start. Since so many families have already come forward, it is now feasible for our laboratory staff to begin DNA analysis in earnest. We hope to begin these analyses early in 1998.

In the next 4 ½ years we aim to recruit a total of 600 families, so we still have a lot of work ahead of us. **We are looking for families with one ill member, with participation by at least one parent, OR families in which two siblings are both affected with a psychotic illness. If you know of anyone who might be eligible for our study and willing to participate, please ask them to call us toll free at 1-800-994-8182.**

## Recent Findings

*Vishwajit Nimgaonkar, Principal Investigator*

We have commenced laboratory analysis on data from a prior genetic study which uses a design in which we compare ill individuals with UNRELATED individuals who are not ill. Using this type of analysis, we have two tantalizing clues. First, we have found differences between the two groups with regard to the HLA DQB1 gene. This gene is involved in immune regulation and is present in all people, though variants exist. Curiously, we found that one of the variants is MORE common among the well individuals, suggesting that it somehow protects against the illness. We have also discovered another difference with respect to hSKCa3, a gene which regulates the flow of ions across cells, the building blocks of our organs. This work was done in collaboration with scientists at Irvine (California), France and Germany. Here, we found that a variant of the gene is more common among the ill individuals, suggesting that it somehow increases the risk of illness. This work is preliminary and we are keen to find out if other research groups agree with our results. We are also planning to investigate these genes more carefully among the families which participate in our research. Hopefully, this will provide more conclusive proof for our suggestions.

## From Laurie Brar, RN: Bipolar Research

We have recently received many inquiries from families around the country who are interested in our bipolar research. We are most grateful for their willingness to help and are hoping to eventually include many of them into our study. Due to resource constraints, however, we are currently trying to focus on families who live within a 100 mile radius of Pittsburgh. If you know of any families who live in this region and may be interested, please encourage them to call Laurie Brar, RN at 1-800-994-8182. Likewise, if you would like us to speak at a support group, please contact us. The success of our research is greatly dependent upon our ability to include a large number of families. The task ahead of us is great but we meet it with great enthusiasm.

## May we speak at your local NAMI Meeting?

We would be happy to discuss our research at your local NAMI meeting. Topics our staff cover during presentations include theories about the causes of schizophrenia and related illnesses, the nature and aims of our research project, and the preliminary findings to date from our research efforts. We are always glad to answer questions and take suggestions during presentations. Recently, our staff have spoken to NAMI groups in New Kensington, PA, Lancaster PA, St. Mary's PA, Pittsburgh (Mt. Lebanon), Huntington WV, and Morgantown WV. We thank all the members of these groups for their interest and their hospitality.

**Q: If I participate in the study, can I get the results of the genetic test you do?**

**A:** *Most people who ask for the results do so because they want to know if they have the genes that cause schizophrenia, and worry that they are at risk of developing the illness. Unfortunately, at this point we have not identified the genes which make one more susceptible to psychotic illnesses, and until we do, no laboratory results we produce will be meaningful to the average person. The report would describe your genetic makeup, but could not tell you if you are going to become ill. Developing a test to screen for the genes that contribute to schizophrenia and related illnesses is certainly a long term goal of our project, but we are just beginning on the road to that goal. Indeed, we have not begun laboratory analyses of families yet. Whatever results we discover will have to be presented to the scientific community and replicated by other researchers before we can be confident enough to design a genetic test. If, in spite of this, you still would like to obtain the results of our analyses when they become available, we strongly urge you to review them with the help of a certified genetic counselor.*

## **On the Road in Canada: Vish visits the Hutterites**

*Part of our study now includes participation by a unique community of people in Canada, the Hutterites. The Hutterites are similar to the Amish, living communally, sharing resources, and working mostly in agriculture. The similarity in their genetic history and environment makes them very valuable to our study, and their cooperation has been tremendously appreciated. This is Vish's report on his October trip to Canada.*

We planned our recent trip in order to ask for support directly from the Hutterite communities and to inform our medical colleagues in the region about our proposed work. Both our aims were fulfilled. We met approximately 200 members of the Hutterite Community and about a dozen doctors. Our meetings at the Fairholme and Sommerfeld colonies were arranged by our Hutterite colleagues, Selma Maendel, David Gross and Mary Maendel. We were received with great warmth and hospitality wherever we went. All the Hutterites we met as well as the doctors were supportive of our work. Several members of the Hutterite community even offered to participate in the work. Due to time pressures, we could interview only one family.

This trip was gratifying for us, not only because we received so much support, but also because of the warmth and generosity of the Hutterite people. I learned the history and the traditions of the Hutterite people directly. I have great respect for the Hutterite community for standing by their beliefs in spite of great adversity. I was also delighted that we could involve our Hutterite collaborators (Tony Waldner, David Gross, Selma Maendel and Mary Maendel) in all our meetings. We hope this active participation will continue as we start to interview participants in our research.

### **To contact us:**

**call toll free at: 1-800-994-8182**

**fax us at: 412-624-9464**

**reach Dr. Vishwajit Nimgaonkar at: 412-624-0823**

**or visit our web pages:**

**schizophrenia study:**

**<http://www.pitt.edu/~nimga/>**

**bipolar study:**

**<http://www.wpic.pitt.edu/research/neurogen/>**

## **New staff / New Volunteers**

*We are delighted to be receiving support from several new volunteers and staff. All the new staff below attended our recent training in November to learn more about our research and how it is conducted. We welcome their assistance.*

**Mary Del Moro**, of Enon, Ohio has come forward to help us recruit families through clinics and AMI groups. Mary is working on contacting all the AMI chapters in the eastern half of Ohio to publicize our research and perhaps arrange for us to present our study at meetings. Mary is a retired military nurse, and a Vietnam veteran.

**Jessica Woodfork**, of Morgantown, West Virginia, approached Dr. Nimgaonkar after an AMI meeting. While working on a Masters degree in Counseling, Jessica did a voluntary internship at Sharpe State Hospital in Weston, West Virginia. She is currently helping us to recruit and screen potential subjects at Sharpe hospital, and will be pursuing a PhD in the near future.

**John Strauss, M.D.**, is a Resident in Psychiatry at Western Psychiatric Institute and Clinic who has begun volunteering his time with us. John recently spoke to a local AMI group about our most recent findings.

**Nancy Deily**, of Pittsburgh, is a volunteer who has been helping us in a variety of ways. She has elicited the support of the Depressive and Manic-Depressive Association in Chicago (DMDA) on our behalf. Nancy is also helping us to investigate the feasibility of doing live video interviews of subjects who live throughout the United States. Nancy has a Bachelor of Science in Nursing.

**Jesse Krall** is a newly hired staff person from Wheeling, West Virginia. Jesse will be working as a recruitment specialist in hospital and outpatient clinics throughout West Virginia. Jesse is a member of Wheeling AMI and has a Masters of Social Work degree from West Virginia University.

**Nancy Lieving**, from Huntington, West Virginia, is a psychiatric nurse with 17 years of professional experience. Nancy was recently brought on board to conduct family interviews and blood draws around Huntington and in nearby Kentucky.