

# THE PALM TREE

## The Religious Orders Study Newsletter

*The righteous flourish like the palm tree: they grow tall, like a cedar in Lebanon.  
Planted in the house of the LORD, they flourish;  
Still bearing fruit in old age, vigorous and fresh they will be. PSALM 92.*

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### Winter 2006 Progress Report

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#### **Religious Orders Study Grant Renewed Through 2011**

At the end of every five year funding period we must summarize what we've accomplished in the previous five years and present our plans for the next five years. I am truly pleased to report that our application to the National Institute on Aging to obtain ongoing funding for the Religious Orders Study through 2011 received an outstanding score. I will share with you one quote from the review:

*"The Religious Orders Study Core is a model for outstanding research, and admired for its thoughtful organization, meticulous management and scientific impact."*

The success of the application and the scientific impact is attributed to the dedication of the more than 1100 Nuns, Priests, and Brothers from across the United States who have volunteered to work with us in combating one of the most common and most feared problems of aging— Alzheimer's disease. Some of you were there in 1992 when we first sought support for the study, and some of you have been in the study since 1994 when we tested our first participants. Through your ongoing participation, the Religious Orders Study will continue to teach us how to treat, and ultimately, how to prevent Alzheimer's disease. The study has now generated more than 100 scientific publications, many of which are considered to be seminal works in the field and were accompanied by press releases from such prestigious institutions as the National Institutes of Health and the American Medical Association, and many have been accompanied by editorials in leading medical journals. Of course, the popular press has had a long interest in chronically in the altruism of the more than 1100 Catholic Clergy participating in the study.

Once again, during this holiday season, my staff and I would like to thank each and every one of you for your prayers and the tremendous gift you are giving to this and future generations.

THANK YOU!

Dr. David Bennett

**Clinical Trials Update** by Julie Bach, Autopsy Coordinator

Rush Religious Study volunteers are a crucial part of the team effort in understanding changes of aging and memory loss. Each study member offers unique information and is a gift to future generations by helping researchers in discovering how to age successfully. As all the Rush Religious Study participants know no medications or interventions are tested in this study. However, there are other studies that are currently recruiting volunteers and some test new medications.

Every clinical trial attempts to answer a specific research question. Medications must be tested for safety and effectiveness by the Food and Drug Administration (FDA) before they can be prescribed by doctors. The medications currently available for the treatment of Alzheimer's disease: Exelon, Aricept, Razadyne ER, and Namenda moved through the clinical trial development process.

Today there are Alzheimer's disease studies throughout the country in different phases of the clinical trial process. Below you will find a few of the studies that are currently recruiting volunteers. As with the Rush Religious Study a study may enroll persons with or without Alzheimer's disease. All of the studies listed are being conducted at the Rush Alzheimer's Disease Center in Chicago but also may be available in other locations.

**Alzheimer's Disease Neuroimaging Initiative**

The goal of this multicenter study is to determine whether imaging of the brain (through MRI, PET or CAT scans) can help predict and monitor the onset and progression of Alzheimer's disease. Individuals with mild cognitive impairment are especially needed for this study. To learn more about this study please call the ADEAR Center at 800-438-4380 or in Chicago, Julie Bach at 312-942-8264.

**Takeda Study**

The study is being conducted to evaluate whether an investigational sleep medicine can help treat sleep problems in people who have mild to moderate Alzheimer's disease. The person must experience at least two sleep problems and can not currently be on medications for sleep problems. To learn more about this study contact the Rush Alzheimer's Disease Center, 312-942-8264.

**Chinese Herb (Huperzine A) Study**

A study to find out whether Huperzine A, a Chinese herb, can slow down or prevent the symptoms of mild to moderate Alzheimer's disease. Individuals can NOT currently be taking Aricept, Exelon, or Razadyne ER and they must have a diagnosis of Alzheimer's disease to be eligible for the study. For more information call the ADEAR Center at 800-438-4380.

Clinical trial information is located on the ADEAR center website, <http://www.nia.nih.gov/alzheimers> or 800-438-4380 or the Alzheimer's Association website: <http://www.alz.org/overview.asp> and go to the clinical trials link.

Individuals participate in clinical trials to help themselves and others improve their quality of life. Rush Religious Study volunteers serve as an example of how important that participation is to improving the quality of life for all of us.

**Staff Update** by Traci Colvin, Study Coordinator

It takes a LOT of staff to see each of you on a yearly basis. This year, with the addition of our Latina sites, our staff has grown again! Please join us in welcoming new research assistants to the Religious Orders Study: Icela (Chelin) Donahue and Jennifer Fleets.

We also would like to introduce Kefiloe (Manana) Tsotetsi who is our Laboratory Coordinator. She oversees the processing and storage of blood specimens in our lab. Manana is no stranger to the Religious Order Study, having worked with us as a Pathology Technician for several years before her promotion to Coordinator.

One of our research assistants, Sandra McCain has been promoted to a new position. Sandra will now serve as Assistant Coordinator on a sister study, the Minority Aging Research Study (MARS). In addition to training new research assistants on testing procedures, Holli Jacobs has been moved up to Project Coordinator; she will assist George Hoganson and the other Assistant Coordinators in making sure that your annual testing sessions are completed in an efficient and timely manner. Congratulations to them both!

Finally, we said farewell and God Speed to some of staff who have left to pursue other goals: phlebotomist: Paula Aofolajuwonlo, nurse: Pamela Locklin and research assistant, Tony Owili. Both Pam and Tony worked with us for nearly five years. We thank them for all of their hard work and dedication to the study and wish them the best in their future endeavors!

**Multicultural Update** by Karen Lowe Graham, Multicultural Outreach Coordinator

The Rush Alzheimer's Disease Center focuses on three major things: education, evaluation and research. The multicultural outreach team focuses on educating communities of color about Alzheimer's Disease and recruiting priests, nuns and brothers into the Religious Order study (ROS).

This year staff attended the Joint Conference of the National Black Sisters Conference and the National Black Catholic Clergy in Lexington, KY. Several members of various religious communities showed interest in becoming participants and invited us to share information about the Memory and Aging Project (MAP) in their cities. (Note: MAP is a lay person's version of ROS.)

We are excited to announce that staff from our center continued their recruitment efforts in San Antonio, Texas! In March of this year, Dr. David Bennett, Dr. Kristin Krueger, Gucha Lobo and Traci Colvin visited several religious communities including St. Teresa de Jesus, Divine Providence, Sacred Heart (Sagrado Corazon) St. John Bosco (San Juan Bosco), Hermana Josefina and the Missionary Sisters of Our Lady of Perpetual Health. They gave numerous talks and were successful in recruiting 18 Latina nuns into ROS. Their plan is to go back next year and recruit more priests and nuns into this important study. If you would like to learn more about our recruitment efforts into religious communities of color, please contact me. I can be reached at 312-942-6118 or by e-mail at KGraham@rush.edu.

## **Study Update** by Dr. David Bennett

The Religious Orders Study achieved many milestones in 2006. We surpassed 1100 study participants in 2006. Following translation of all of our evaluation forms into Spanish, we tested our first participants in Spanish in San Antonio in 2006. In 2006, 150 participants completed their 13<sup>th</sup> annual clinical evaluation. The Religious Orders Study was refunded in 2006 for an additional five years. Some of you will be tested a total of 18 times by that time. We passed 100 original-report manuscript publications in 2006. The publications cover a wide range of topics in addition to the identification of risk factors for Alzheimer's disease and the neurobiology of Alzheimer's disease. We found that about a third of people without any obvious cognitive problems have fully developed Alzheimer's disease pathology suggesting that there are factors which prevent us from expressing the pathology of Alzheimer's disease, a concept called neural or cognitive reserve [5]. We found that diabetes is a risk factor for the development of clinical Alzheimer's disease but it appears to do so by increasing risk of little strokes suggesting that some risk factors for Alzheimer's disease cause the illness through unexpected mechanisms that will have important implications for disease treatment and prevention in the future [2]. We found that walking problems [9] and weight loss [6] are related to Alzheimer's disease pathology suggesting that the public health burden of the disease is probably much larger than we realize.

### Selected Publications

1. Aggarwal NT, et al. Motor dysfunction in mild cognitive impairment and risk of incident Alzheimer's disease. *Archives of Neurology* 2006;63:1763-1769.
  2. Arvanitakis Z, et al. Diabetes mellitus is related to cerebral infarction but not Alzheimer's disease pathology in older persons. *Neurology* 2006;67:1960-1966.
  3. Bell KFS, et al. The Alzheimer's disease-like amyloid pathology progresses in a neurotransmitter-specific manner. *Neurobiology of Aging* 2006;27:1644-1657.
  4. Bennett DA, et al. Decision rules guiding the clinical diagnosis of Alzheimer's disease in two community-based cohort studies compared to standard practice in a clinic-based cohort study. *Neuroepidemiology* 2006;27:169-176.
  5. Bennett DA, et al. Neuropathology of older persons without cognitive impairment from two community-based clinical-pathologic studies. *Neurology* 2006;66:1837-1844.
  6. Buchman AS, et al. Body mass index in older persons is associated with Alzheimer's disease pathology. *Neurology* 2006;67:1949-1955.
  7. Koliatsos VE, et al. Early involvement of small inhibitory cortical interneurons in Alzheimer's disease. *Acta Neuropathologica* 2006;112:147-162.
  8. Schipper HM, et al. Heme oxygenase-1 expression in MCI and early AD. *Neurobiology of Aging* 2006;27:252-261.
  9. Schneider JA, et al. Neurofibrillary tangles in the substantia nigra are related to gait impairment in older persons. *Annals of Neurology* 2006;59:166-173.
  10. Shah RC, et al. Blood pressure and lower limb function in older persons. *Journals of Gerontology: Medical Sciences* 2006;61:839-843.
  11. Stoub TR, et al. Hippocampal disconnection contributes to the memory dysfunction in individuals at risk of Alzheimer's disease. *Proceedings of the National Academy of Sciences* 2006;103:10041-10045.
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**Spanish ROS** by Dr. Kristin Krueger

*¡LES DESEAMOS FELICES FIESTAS!*

*Tenemos muchas razones para celebrar y valorar este año. Estamos muy agradecidos por las visitas a las hermanas de San Antonio que nos recibieron con una cálida hospitalidad.*

*Disfrutamos conociendo a este grupo de mujeres increíbles, muchas de las cuales hablan inglés y español. De su experiencia por todo el mundo, han conseguido infinidad de éxitos e historias maravillosas que compartir. Junto con las hermanas de Nueva York, nuestro grupo de hermanas de origen hispano continúa creciendo.*

*Recordamos con cariño a Sor Hortense Ricca, de Santa Teresita en San Antonio, que falleció en el mes de Septiembre. Que descanse en paz en la gloria de Dios. Agradecemos a Sor Maria Luisa Aldape por su atención y ayuda en este asunto y por hacer posible los preparativos finales del estudio.*

We would like to wish everyone a very happy holiday season! We have many reasons to celebrate and appreciate this year. We are grateful for our visits with the sisters in San Antonio who received us with such warm hospitality. We enjoyed meeting this very interesting group of women, many of who speak English and Spanish. Collectively, they have experience all over the world and have many accomplishments and delightful stories. Together with the sisters in New York our group of sisters of Hispanic origin continues to grow.

We remember with fondness Sr. Hortense Ricca from St. Theresa's in San Antonio who passed away in September. May her soul rest in peace in God's glory. We thank Sr. Maria Luisa Aldape for her attention in this situation as she helped us to make the final study arrangements possible.

**Education** by Pam Smith, Education Coordinator

Giving to this and future generation is what the participants in the Religious Order study is known for. It is with that altruism, we have had the opportunity to learn about aging and Alzheimer's disease. It is my honor to work with each and everyone of you in the coming year. I will be contacting each site and offering educational seminars as well as discussing staff training. I look forward to our discussion on how our education can meet your interest and needs.

**Nutrition and the Brain** by Martha Clare Morris, Sc.D.

A new and exciting area of study is how what we eat affects the brain and age-related conditions and diseases. There is some evidence that eating foods that are rich in vitamin E and healthy fats (vegetable oils, nuts, seeds, fish, green leafy vegetables, and whole grains) and low in saturated and trans fats protects against cognitive decline and the development of Alzheimer's disease.

We are very pleased to announce that participants of the Religious Orders Study will now be able to contribute a great deal to this very important field of study. We will be asking you to complete a simple questionnaire about your usual consumption of a variety of foods. This will allow us to link dietary behaviors to different clinical conditions as well as to brain health. So be on the lookout for this new and vital part of the Religious Orders Study.

## In Blessed Memory

*The following participants are cherished and remembered (December 2005 – November 2006).*

Sr. Mary Barbara Beyenka, O.P.  
Rev. Joseph Connors, S.V.D.  
Sr. M. Frances Depaula Coyne, O.P.  
Sr. Mary A. Cramer, B.V.M.  
Sr. M. Louissette Desalle, S.S.F.  
Sr. M. Davidis Devine, B.V.M.  
Rev. Ivan J. Dobnikar, O.S.B.  
M.M.  
Sr. Virginette Esner, O.S.F.  
Sr. Virginia M. Ezerski, S.S.C.  
Rev. Thomas F. Foley, M.M.  
Rev. Francis Garvey, M.M.  
Sr. M. Justitia Gaynor, R.S.M.  
Sr. Bernardine Goebel, O.S.B.  
Sr. M. Charlotte Greene, B.V.M.  
Sr. Mary Agnes Jean Groff, B.V.M.  
Sr. Marie Majella Gudgeon, O.P.  
Sr. Marie Hamel, C.S.J.  
Sr. Mary Angela Harris, F.H.M.  
Bro. Alban Herberger, O.C.S.O.  
Sr. Arleen Hynes, O.S.B.  
Sr. M. Rosaria Janik, C.S.S.F.  
Sr. Bartholomew Joseph, S.S.F.  
Sr. Lauren Kenny, R.S.M.

Sr. Joseph Mary Kosarsky, O.S.B.  
Sr. Celine Kraker, O.S.B.  
Sr. Catherine Ludwig, O.S.B.  
Msgr. William Martin (Gary)  
Bro. Timothy McCarthy, F.S.C.  
Sr. Jane Meara, O.S.F.  
Rev. James M. O'Brien,  
  
Sr. Camillus O'Connor, B.V.M.  
Sr. Mary De Sales Oliver, S.S.F.  
Sr. M. Winfrida O'Rourke, R.S.M.  
Sr. Emily Oszewski, O.P.  
Sr. Dora Plakut, O.S.B.  
Sr. Janine Polinski, C.S.F.N.  
Sr. Hortense Ricca, S.T.J.  
Rev. Kevin Ryan, O.S.B.  
Rev. Bartholomew Sayles, O.S.B.  
Rev. Gregory Sebastian, O.S.B.  
Sr. Joachim Stabler, R.S.M.  
Rev. Joseph A. Strenski (Chicago)  
Sr. M. Clotilde Victor, C.S.S.F.  
Bro. Vincent Webb, S.V.D.  
Sr. Joyce Williams, O.S.B.  
Rev. Joseph Windolph, O.F.M.

**We Wish You a Blessed Christmas  
and a  
Peace-filled New Year!**

**Staff of the Rush Religious Orders Study:**

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Raj Shah

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Kefiloe Tsotetsi

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Dennis Frawley  
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Wayne Longman  
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