Michael and Maudene Fruehwirth left the fun and sun of a Riviera Maya beach to move to Tucson in 2001. But the warm embrace of this community affirms their choice of retirement communities in the United States. Michael and Maudene originally retired to Merida, Yucatan in 1988 and they later built their “Villa San Miguel” home on an idyllic beach in Akumal, Riviera Maya, Mexico.

As health questions began to arise, this bright, vibrant couple began to rethink their distance from quality medical care. Michael had angioplasty with a stent in Merida which was a four-hour drive from the beach. Shortly after, they noticed a slight tremor in his right side. Two years after coming to Tucson, Dr. Sherman diagnosed Michael with Parkinson’s. Moving was the right decision.

“Tucson gives us the sun and warmth without the hurricanes. We know Tucson will be our last home. We sought the very best medical care in town and found that at the University of Arizona. We are also very proud of the world-class research underway on the campus, and Maudene and I are proud to support it,” says Michael. The couple’s generosity and sense of community spring from lifetimes of hard work.

Michael grew up in Croatia – occupied by communist Yugoslavia. His father spent six years in a communist concentration camp. Michael and his family waited 10 years and separately immigrated to the United States, settling in the Milwaukee area.

To put himself through school at University of Wisconsin at Milwaukee, Michael had to work many jobs including steel mills, concession for the Milwaukee Braves, ballroom dancing and a teaching assistant in math. He received a bachelor’s degree in Engineering, Applied Physics and Math from UW, and a master’s degree in Industrial Engineering from Illinois Institute of Technology. He also holds a professional degree in International Business from the American Graduate School of International Business – Thunderbird – Glendale, Ariz. He is one of the first Registered Professional Engineers in Quality Engineering in U.S. history (#217), of which he is very proud. He also is a member of the National Industrial Engineering Honor Society.

He published a number of technical articles and presented them at national and international conferences.

Michael retired from AT&T Network Systems (later Lucent Technologies) after 25 years of service as Quality Assurance Engineering Planning and Administration Manager. From his overseas assignments he added three languages to the three he already spoke.

Maudene was Amoco Chemical’s first female sales representative and also was in sales for Economic Labs. After spending four years overseas on Michael’s AT&T international assignments, she opted for a more flexible career in real estate when they returned.

The Fruehwirths lived in Belgium, Italy...
Deferred charitable gift annuities help support the College of Medicine and, at the same time, they provide income payments during your retirement years. Michael and Maudene Fruehwirth wanted to support the College of Medicine, but they also wanted to preserve a stream of income payments to supplement their retirement plans. They were thrilled to find a way to accomplish both.

By using the deferred gift approach, they made a significant gift to the College of Medicine and benefited from the charitable tax deduction that accompanied the gift in the year they made it. “This gift is a great way for Maudene and me to support research, leave a legacy to the College of Medicine, receive an immediate tax deduction and an excellent rate of payments for our future retirement,” says Mr. Fruehwirth.

A deferred gift annuity may be created for one or two lives with no worries or responsibilities regarding managing the assets that fund the annuity. A gift annuity enables you to make a special and enduring gift to strengthen the College of Medicine when the funds become available.

Married couples find gift annuities especially advantageous because they provide the security of a fixed payment for the life of both individuals. Generally, the older you are and the longer the deferral period, the higher the fixed annual rate of payments. (See examples of one life payment rates in the table below. Rates for two lives are slightly lower.)

The planned giving specialists at The University of Arizona Foundation will gladly review the specific financial benefits you can enjoy from a deferred charitable gift annuity. Please call Brian Bateman at (520) 626-2827 for a personalized report of what you could expect.

“We are proud of the hopeful research underway at the College of Medicine in Parkinson’s, cardiac disease and cancer and we are grateful to be able to contribute to its continued success,” Mr. Fruehwirth says.

<table>
<thead>
<tr>
<th>Age Created Annuity/ Age of First Payment</th>
<th>Annuity Rate</th>
<th>Term to First Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>55/65</td>
<td>9.6%</td>
<td>10 years</td>
</tr>
<tr>
<td>55/70</td>
<td>13.8%</td>
<td>15 years</td>
</tr>
<tr>
<td>56/65</td>
<td>9.4%</td>
<td>9 years</td>
</tr>
<tr>
<td>56/70</td>
<td>13.1%</td>
<td>14 years</td>
</tr>
</tbody>
</table>
When medicine fails Parkinson’s patients, deep-brain stimulation (DBS) often is the next step for relief from symptoms. However, a troublesome downside is that DBS patients often exhibit compulsive behaviors that healthy people and those taking medication for Parkinson’s can easily manage.

Michael Frank, an assistant professor of psychology and director of the UA Laboratory for Neural Computation and Cognition, led a research team that has shed light on how DBS interferes with the brain’s innate ability to deliberate complicated decisions.

DBS implants affect the region of the brain called the subthalamic nucleus (STN), which also modulates decision making.

“This part of the brain regulates the ‘hold-your-horses’ signal,” Frank said. “When you’re making a choice between two or more conflicting options, normally your system says, ‘Hold on for a second. I need a little more time to sort this out.’”

The STN detects conflict between two or more choices and reacts by sending a neural signal to temporarily prevent the selection of any response. It’s this response that DBS seems to interrupt. DBS acts much like a lesion on the subthalamic nucleus. Frank’s hypothesis predicted that DBS would negate the “hold-your-horses” response to high-conflict choices. Included, DBS sped up the decision-making process, leading to impulsiveness.

**Medicine vs. DBS**

The tendency toward impulsive behavior in Parkinson’s patients is well documented but only dimly understood. How is the STN involved in decision making and why should things go awry when you stimulate it?

Frank contrasted patients taking medications and found that they did not learn from negative outcomes of their choices, which could be one explanation for why some patients develop gambling habits. If you learn only from positive outcomes but not from the negative, it could cause you to become a gambler.

“Whereas the DBS has no effect on positive versus negative learning, it had an effect on your ability to ‘hold your horses,’ so it was a disassociation between the two treatments which we think reveals different mechanisms of the circuit of the brain that we’re interested in,” Frank said.

**On the Horizon**

Frank is interested in whether impulsive decision making can be prevented in DBS patients. One long-range goal is to test the STN during the implant surgery, avoiding the decision-making areas and targeting only the brain’s motor function.

Frank’s collaborators include Johan Samanta of the UA neurology department and Banner Good Samaritan Medical Center in Phoenix, Ahmed A. Mousafa of the UA psychology department and Scott Sherman of the UA neurology department.
APS Gift Honors Donald N. Soldwedel

APS, a subsidiary of Pinnacle West Capital Corporation, made a substantial corporate gift in support of the Parkinson’s research initiative at the UA College of Medicine. In a recent interview, William J. Post, chairman and CEO of Pinnacle West, attributed the board members’ decision primarily to the leadership and commitment of Don Soldwedel, who chaired the fundraising effort to raise $1.8 million to recruit two new Parkinson’s disease researchers to the UA.

“Our company feels strongly about making a positive impact in the fight against Parkinson’s Disease. That said, our investment in this initiative is very personal. It is because of Don Soldwedel,” said Post. “I have known Don for 30 years and it was heart-wrenching to see how Parkinson’s ravaged him these last few years. It was also inspiring to see how he responded with strength and vigor as he has to so many external challenges.”

“We could not have made this tribute to a more wonderful guy—just look what this man has done for The University of Arizona and for so many other worthwhile projects around Arizona,” Post added. “Don had a great business sense, but character came first for him. The stories he told about building trust and confidence in long-term business relationships are both amazing and inspirational.”

Don joined Pinnacle West as a board member in the late 1970s and dealt with many company issues over the years. “He was always forward-looking, always wanted what was best for everyone and always approached challenges as a kind and thoughtful statesman. Here was a man who had a real significant impact in this state over the years,” Post said.

“Our company is proud to have given to many worthwhile projects at The University of Arizona over the years, but this one holds special meaning for us because of Don. You just consider the sum of all his contributions and his leadership and impact have been terrific,” said Post. “My wife and I had lunch with him recently, and it was amazing to notice the difference between his declining health and his pure mental strength and force coupled with his optimistic orientation to the future.”

Don Soldwedel died Wednesday, February 20, 2008. His family and UA Foundation president James H. Moore Jr. have requested memorial gifts to the University be divided equally between the journalism department and Parkinson’s research, unless the donor makes a specific request. Gifts may be addressed to UA Foundation: Soldwedel Memorial; P.O Box 210109; Tucson, AZ 85721-0109.
American Parkinson Disease Association and UA: partners in public service

The University of Arizona has a three-fold mission of excellence in teaching, research and public service. It is in the area of public service that the American Parkinson Disease Association (APDA) and the university have worked as close partners over the years.

For more than two decades The University of Arizona College of Medicine has hosted a Parkinson's Information & Referral Center in order to help all Arizonans with Parkinson's and their family members find the information and resources they need. Funding for the Center's operation comes from the American Parkinson Disease Association (APDA) through a grant to a College of Medicine faculty member. This faculty member volunteers his or her time as medical director for the Center.

The Center was established in 1985 with a grant to neurologist Stuart Snider, MD. Others faculty who have volunteered their time and energy as medical directors include Alan Rubens, MD, then head of the department of neurology; movement disorders specialist Erwin Montgomery, MD; and current head of the department of neurology, Bruce Coull, MD. Since 1999, Scott Sherman, MD, PhD, director of the movement disorders program at the College of Medicine, has served as the Center's medical director.

Cynthia Holmes, PhD, a health psychologist, has coordinated the Center since 1992. Dr. Holmes received her bachelor’s degree from the University of Pennsylvania and her masters and PhD in health psychology from the University of California San Francisco. She endorses the principles of integrative medicine in the treatment of Parkinson’s disease and writes and lectures frequently on this topic. In her role as Center Coordinator she counsels and provides information to patients and family members, teaches a popular Power Over Parkinson’s class, works with support groups, edits a Parkinson’s newsletter, organizes educational events and gives presentations to community groups.

“The College of Medicine is pleased and proud to host the information and referral center with the APDA and to have worked hand-in-glove over the last twenty years,” says Keith A. Joiner, MD, MPH Vice Provost for Medical Affairs and Dean of the College of Medicine. “While our success in education, research and patient care is widely acknowledged, too few recognize the important role we have in providing outreach and support statewide. The leadership of Dr. Holmes and her colleagues over the years has enabled the College of Medicine to be of service to all Arizonans with Parkinson’s disease. I must say, she has also been of immense help and support as we have reached out to seek increased support for research.”

Dr. Holmes welcomes inquiries from people with Parkinson’s, their family members and friends. Her next 4-week Power Over Parkinson’s class will be offered Tuesday mornings in August. The class is free but advance registration is required. For more information or to sign up, contact Dr. Holmes at holmes@u.arizona.edu.
Parkinson’s patients and caregivers gathered Saturday, February 2nd in DuVal auditorium to participate in a unique and valuable program. The brainchild of renowned landscape architect Richard Carothers, the program was designed around the most frequent issues posed by registrants. By Carothers design, nearly every attendee submitted a question to be addressed by a panel of caretakers and people with Parkinson’s. The collaboration between the UA College of Medicine’s Medical Neurosciences Program and the Arizona Chapter of the American Parkinson’s Disease Association attracted 256 participants.

“I wanted to provide some very practical information that would benefit people,” said Carothers, program chair and Parkinson’s patient. “Those living with the disease and providing care have the best information about this disease and how to address issues as they arise.” In addition to covering the topics presented prior to the program, the panel members answered questions from the audience. Scott Sherman, MD, PhD, associate professor of Neurology at the College of Medicine and medical director of Arizona Chapter of APDA, provided a research update. Feedback about the program was very positive.

If you would like to be added to the mailing list for information on upcoming programs, please call (520) 626-2827 or email health@email.arizona.edu.
Participating in a Clinical Trial

Medical research is the driving force in health care. Scientific investigations provide hope for better and longer lives. Medical research prevents disease and aims to find breakthroughs for new methods of healing and wellness. New advanced treatments and clinical trials of promising new medications and therapies offer hope to patients and their families. The University of Arizona is one of our nation’s great research universities, consistently ranking among the top of all U.S. research institutions, public and private.

At any given time UA College of Medicine Medical Neurosciences faculty participates in a number of ongoing multicenter clinical trials, and several conduct additional basic science research.

What is a clinical trial?

New medications and treatment therapies to treat a variety of health problems and medical conditions are being developed every day. A clinical trial is a process by which a new medication or treatment protocol is tested for effectiveness and safety. At a major research institution like The University of Arizona, a number of clinical trials or studies are ongoing. In any clinical trial, the research staff will follow a set of guidelines called a “protocol.” The protocol details safety measures, office exams and medical tests required to track the participants’ progress in the study.

For information about studies dealing with movement disorders, contact:

Madelon Cook  
(520) 626-2319

Your Input is Important...

You are the focus of the Parkinson’s research and outreach at the UA College of Medicine. Improving Parkinson’s treatments and ultimately eradicating the disease depend on our partnership with you and your family. Please take a moment and offer your feedback about what you would like to see and how you would like to be involved.

Issues of Interest

☐ Please consider covering the following topics in future issues of the Parkinson’s newsletter.

______________________________________________________
______________________________________________________
______________________________________________________

☐ Please include us in one of the tours of College of Medicine laboratories conducting translational Parkinson’s disease research.

Issues of Support

☐ Please send more information about ways I/we can support the Parkinson’s research initiative through charitable giving.

☐ I/we are interested in a named gift or endowment in support of Parkinson’s research.

☐ Please send information about a planned gift through my/our estate or other deferred giving tools to support Parkinson’s research.

Enclosed is my gift to support this critical initiative.

Issues of Contact

☐ When you are prepared to send electronic updates and progress reports, please include me/us on your e-mail distribution list at:

______________________________________________________
______________________________________________________
______________________________________________________

☐ Please add the following friends and family to the Parkinson’s disease mailing list.

___________________________________________________________
___________________________________________________________
___________________________________________________________
___________________________________________________________

Name
Address
City, State, Zip
Phone number
E-mail address

Please return this form to: UA College of Medicine, P.O. Box 245018, Tucson, AZ 85724, fax to (520) 626-4884 or e-mail health@email.arizona.edu
Parkinson’s Research
Is Our Hope

Go behind the scenes to see first hand the scientific investigations under way right here at The University of Arizona!

Tour the Parkinson’s Disease Research Labs from 11:30 am to 1:30 pm on the following days

Wednesday, September 10, 2008
Thursday, September 18, 2008
Thursday, October 16, 2008
Thursday, October 23, 2008
Thursday, November 6, 2008
Thursday, December 4, 2008

You must pre-register to attend.

For more information or to register call The University of Arizona College of Medicine 626-2827 or email health@email.arizona.edu