



November 03, 2011

#### This Week Dr. Andrea Donnellan, JPL Program Host Hal Yorke

#### How 4-H influenced a career in earthquake science and a desire to inspire the next generation

Growing up as a 4-H-er, Andrea Donnellan participated in photography and rock hound projects. This helped spur her interest in science and ultimately led to a career in geophysics. Recent developments in using remote sensing for studying earthquakes reveal a dynamic earth and new ways of understanding earthquakes. Today, in addition to being a scientist, Donnellan enjoys inspiring the next generation by giving talks and as a leader of a 4-H club. 4-H is a positive youth development organization that empowers young people to reach their full potential. A vast community of more than 6 million youth and adults working together for positive change, 4-H enables America's youth to emerge as leaders through hands-on learning, research-based 4-H youth programs and adult mentorship, in order to give back to their local communities.

Donnellan has been a geophysicist at NASA's Jet Propulsion Laboratory



# Living the Object of Rotary

The Object of Rotary is to encourage and foster the ideal of service as a basis of worthy enterprise and, in particular, to encourage and foster: First: The development of acquaintance

as an opportunity for service;

- Second: High ethical standards in business and professions, the recognition of the worthiness of all useful occupations, and the dignifying of each Rotarian's occupation as an opportunity to serve society;
- **Third**: The application of the ideal of service in each Rotarian's personal, business and community life;
- Fourth: The advancement of international understanding, goodwill, and peace through a world fellowship of business and professional persons united in the ideal of service.

One of our members, Ray Carlson, exemplifies the Object of Rotary set forth above. Since Ray first became a member of our Rotary Club back in 1989 it became clear immediately that he was an innovater and self-starter. At the time the *Iron Curtain* was coming down, and countries that had been under the grip of communism for decades were finally being set free to chart a new course. Ray saw the opportunity to introduce free enterprise to students in Poland — joined with new Rotary Clubs that had been recently formed in Poland, made deals with large US corporations to provide computers and personally traveled to Poland to set up business training courses at Polish universities.

As you can see by this initial project and others that he has initiated since, Ray does not think small. Since the Poland project, he has been behind entrepreneurship training programs in Armenia, Nazareth, Beirut, Tijuana, Nigeria and now ... the Philippines. He has also set up such programs on Indian Reservations as well as in middle and high schools in our local community. In addition to all that, Ray is involved each year in the Peace Confer-

Please turn to View, p. 4





## **Program Review**

#### Waldorf Schools ... A Different Curriculum Not a computer in sight!

Tom McCurry completed his month as Program Host through an intro duction of our visitors — Carolyn Leach, Administrator, & Dennis Demanett, Teacher, Waldorf School of Altadena that mentioned two salient points:

- **First:** A *Wall Street Journal* article on the Waldorf schools' [... more than 1,000 schools worldwide!] contrarian view that young children should not use computers, so as to focus first upon learning other things of importance.
- Second: Our speaker, Dennis Demanett, went to Vienna in 1971-72 with the sup-

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port of a Rotary Scholarship. Demanett's colleague, Carolyn Leach, really needed no introduction in that she attended our meeting of two weeks ago and is known to many of us. Both were heartily welcomed.

Demanett began by observing that it was not his first time to speak at Rotary. Upon his return from study in Austria he toured a number of Kansas Rotary clubs to report on his experience. "Home On The Range," he said, is the state song of Kansas, and so he thanked us for singing it for this meeting as it made him feel "at home."

Describing the Waldorf approach to education, our speaker explained that it is not outcome-oriented in the way that are many other educational philosophies. "We're looking at the path," he stated. You can end up at the same place eventually, he argued, but the route one travels to arrive at that spot can mold an individual

#### November Programs Rotary Foundation Month

Program Chair, Hal Yorke

- Nov 03 Dr. Andrea Donnellan How 4-H influenced a career in earthquake science and desire to inspire the new generation
- Nov 10 Meet the Rose Queen & court --Combination meeting in San Marino
- Nov 17 Dr. Joao Teixeira Clouds and Climate Change

Nov 24 - Thanksgiving - Dark

#### December Programs Rotary Family Month

Program Chair, Sue Applegate Dec 01 - To be Announced Dec 08 - To be Announced Dec 15 - Christmas Party - evening Dec 22 - To be Announced Dec 29 - To be Announced differently than the path taken by another. He then explained the effect that living in Austria had had upon



his life. "It brought me by a different path to a very happy career," he said in thanking Rotary for making his early exposure to a defining educational idea possible.

He then spoke of an early disillusionment he experienced with his teacher education BA major at the University of Kansas. When speaking of children, he noticed, his professor didn't seem to have the close bond with them that he had experienced through his long association with scores of cousins back home. Inquiring about this in class, he was told in an icy voice that her experiences with children (or lack thereof) were not relevant to the lecture she was delivering. With that, Demanett changed his major to English Literature, and, because his Rotary Schol-*Please turn to Program, p. 3* 



### Chairmen's orner by Craig

### Activity ... Activity ... Activity

by Craig Cox, Membership Chair



What a difference a little positive activity makes!

We just finished another well attended membership Committee Meeting,

and we have a lot of positive developments that should encourage all of us as we grow the club.

We plan to induct two new members on November 3. We have 4 additional prospects who are considering sending us

### Program

Continued from p.3

arship had made it easier to win further support, he soon found himself traveling to England on a fellowship.

Once there, however, his attention switched from English Lit back to education. In Austria he had had the good fortune to be introduced to Rudolph Steiner, a proponent of Waldorf education. Now, through an introduction to a young Waldorf student with Down's syndrome, he was able to see the difference an educational approach — a Waldorf *path*, if you will — could make in the achievements of even a special needs child. His interest in education now returned.

At this juncture Demanett explained the Waldorf concept of *looping*, wherein a teacher begins with a first grade peer group of students and then follows that same group through eight years of education, teaching all variety of subjects. The advantage of this, he claimed, is that teachers don't have to spend time at the beginning of each school year learning the strengths and weaknesses of each student; they already know them! Demanett has by now completed three cycles of eight years in the course of his career, their application. We have invitations out to local business people to attend a lunch. We are forming a subcommittee to create a master list of great people who should know about Rotary. We are setting up days to canvas local businesses. We have created invitation cards (that everyone should carry) to give prospects. We hope to review a draft of our club brochure in November so it will be ready to hand out in the January. This is all terrific!

Our next Membership Committee Meeting will be November 16 at 7p at my house. We will then go dark until January. In the meantime, I challenge everyone in the club to think about one person who would make a good Rotarian and invite him or her to lunch. Don't worry about whether the person has the time or would be interested — if you think he/she is a good candidate, just invite that person. You may be surprised when that person says, "yes" and comes to lunch and has a wonderful time (heck, we're a pretty fun group of people).

Thanks, again, for all you do.

and he hopes to continue with this year's sixth graders to the completion of a fourth cycle.

Every form of education has at its core a viewpoint as to the essence of a human being. With Waldorf, our speaker explained, the child is seen as a riddle to be explored. "Who is this person?" is therefore the focus of each teacher as they attempt to find that which will spark the child's learning. The Waldorf philosophy maintains that there are milestones of archetypal development that can be observed in the classroom, inasmuch as physical and mental developmental changes tend to occur together and in concert with known developmental cycles.

Strange as it may seem, then, the classroom teacher may note a child's loss of baby teeth as a clue that the child is probably experiencing other changes that may not be so readily observable. Demanett spoke of the first seven years of life as generally having imitation as a theme, whereas in the second cycle of life the child looks to authority for guidance.

Waldorf education's emphasis for pri-

mary school students is the building of imagination as the root of a person's thinking, so that, by the time the child reaches first and second grade, he/she is shifting from aping our moods, words and actions to learning through a more complex modeling on the adults to whom they are regularly exposed. Thus, he said, Waldorf education endeavors to give them *goodness* to imitate in the form of stories, fairy tales and the myths of many cultures — as well as the artistic outlet through which to express what they are observing.

By the middle primary years, children are engrossed in exploring how to provide for themselves the many things which, until now, have been taken for granted. They are learning to separate their identities from that of their parents, and it naturally engenders a certain discomfort and a lot of questioning. Children of this age are drawn to a story such as that of the Garden of Eden in the Book of Genesis, because they can relate to *leaving* a protected environment. Waldorf education seeks, then, to enhance the natural themes of childhood through *Please turn to Program, p. 4* 



#### Economic Update Last Week in the News

The combined construction of new single-family homes and apartments in September jumped 15 percent to a seasonally adjusted annual rate of 658,000 units. Single-family starts increased 1.7 percent. Multifamily starts rose 53 percent. Applications for new building permits, seen as an indicator of future activity, fell 5 percent to an annual rate of 594,000 units.

Industrial production at the nation's factories, mines and utilities rose 0.2 percent in September. Compared to a year ago, industrial production is up 3.2 percent. Capacity utilization rose to 77.4 percent in September from a revised 77.3 percent in August.

The producer price index, which tracks wholesale price inflation, rose 0.8 percent in September after a flat reading in August. For the year, seasonally adjusted wholesale prices are up 6.9 percent. Core prices — excluding food and fuel — rose 0.2 percent in September.

The National Association of Home

#### View

#### Continued from p.1

ence, this year to be held on November 13 in Palm Springs. As we all know, at 81 years of age, Ray is showing no signs of slowing down.

Therefore, it should be no surprise to any of us that Ray has been nominated by District 5300 and our District Governor, Doug Fowler, as the District's nominee to receive the *Global Alumni Service to Humanity Award*, for his work in Rotary, such as Job Creation for New Generations through Entrepreneurship Education. In addition, Ray is has been nominated for Builders/Wells Fargo monthly housing market index rose four points in October to 18. The reading was the highest level since April 2010. An index reading below 50 indicates negative sentiment about the housing market.

Existing home sales fell 3 percent in September to a seasonally adjusted annual rate of 4.91 million units from an upwardly revised 5.06 million units in August. The inventory of unsold homes on the market decreased to 3.48 million, an 8.5month supply at the current sales pace, up from an 8.4-month supply in August.

Initial claims for unemployment benefits fell by 6,000 to 403,000 for the week ending October 15. Continuing claims for the week ending October 8 rose by 25,000 to 3.7 million.

Upcoming on the economic calendar are reports on the housing price index on October 25, new home sales on October 26 and pending home sales on October 27.

Find Linda Wilkes on line: <u>http://</u> www.myprospectmortgage.com/lwilkes

this award by Zone 26, which includes fourteen Districts, including our District, representing 731 Rotary Clubs and 32,360 Rotarians. As a result, Ray is only one of 33 nominees worldwide to receive this award.

I hope all members are as proud as I in this major milestone in Ray's Rotary career and a culmination of many years of putting *Service Above Self* and personifying the Object of Rotary. Congratulations Ray on this recognition that you justly deserve.

### This Week

Continued from p. 1

since 1993 and a research professor at the University of Southern California. She studies earthquakes and crustal deformation by integrating satellite technology with high performance computer models. In addition to her current roles as Principal Investigator of NASA's QuakeSim project and a research scientist involved in supercomputing, earthquake modeling, and UAVSAR projects. Donnellan is Co-Lead for Natural Disasters within NASA's Applied Sciences Program. She has conducted field studies in California. in Antarctica, on the Altiplano of Bolivia, in Mongolia, and on Variegated Glacier in Alaska

Donnellan received a bachelor's degree from the Ohio State University in 1986, with a geology major and mathematics minor. She received her master's and PhD in geophysics from Caltech's Seismological Laboratory in 1988 and 1991, respectively, and held a National Research Council postdoctoral fellowship at NASA's Goddard Space Flight Center. She received an MS in Computer Science from the University of Southern California in 2003. She was a recipient of the Presidential Early Career Award, the MUSES of the California Science Center Woman of the Year Award, three NASA Space Act Awards, the Antarctic Service Medal, and was a finalist in the astronaut selection process three times. Donnellan grew up in 4-H and is now leader of the Alta Pasa 4-H Squad.  $\bigcirc$ 

### Program

#### Continued from p.3

imagination, exposure to many artistic and cultural influences, and through play and rich personal interaction. The Three Rs are covered in time, but it is the body, soul and spirit that are first addressed.

You may wish to turn to Gordon's Corner on p. 5 for a further explanation of the Waldorf School philosophy.

Gordon Seyffert 🔿



Introductory Note: The title of this column, seen above, seemed a better choice than "Dust From the Rotary Wheel." Whatever the case, the intent is to add another facet to Sparks, but on an occasional basis. For this initial number I'm expanding upon my Program Review of last week by reporting on a lecture I heard that relates to the Waldorf school educational philosophy.

"Turning Education on Its Head: What Modern Brain Research Says About How Children and Young Adults Learn" was the topic of a lecture on Friday, September 30 at Pasadena City College. The speaker was Douglas Gerwin. PhD. He is the founder of the Waldorf High School Teacher Education Program at the Center for Anthroposophy [look it up at Wikipedia...]. Gerwin is also the editor of several books on the topic of Waldorf education, and thus qualifies as a local authority on the subject. His lecture was well attended by a mostly college-age crowd, most of whom seemed to have a working familiarity with Waldorf education. Here is a statement that appears in the publicity for the lecture:

"Recent neuro-scientific research shows that the brain behaves less like a *hard-wired* computer, more like a dense forest in which pathways appear through repeated use and disappear through neglect. The implications for education of this paradigm shift are huge, especially since the cortical functions of children and young adults do not fully develop until they reach their early 20s."

You may recall that Dennis Demanett, our speaker of last week, made reference

to students having different paths to the same educational goal. The use of pathways in the above statement is not, I believe, accidental; it is a variation on the same metaphor. Gerwin used his native Massachusetts forests for the mental image of *pathways* which he chose to depict within the minds of his listeners.

Imagine, he said, that you're taking a daily walk in a nearby forest. Each day you may choose to follow the same path, to the effect that you quickly begin to wear a path through the leaves. If you really enjoy this path, you will probably at some point enhance it through the addition of mulch, fine gravel, or some other substance in order to preserve it. But if you should choose another route to your destination, then leaves will begin to cover the first path again. And, if totally neglected, it will in time become just as any other part of the forest. The pathway will then have become lost.

Gerwin spoke of how we once conceptualized the brain as a computer-like organ, in that it was seen to process information according to a complex set of *machine* operations. What was important for the brain researcher was then to discover the means by which this occurred and the ways knowledge acquisition could be enhanced.

Today's understanding, by contrast, corresponds better to the forest pathway metaphor. The brain is a highly *plastic* organ that creates pathways for information within itself. These pathways can be reinforced, but they can also become neglected; nothing is permanent. Under the old concept, the goal of education was merely to transmit a body of information. More on this *plasticity* next time.

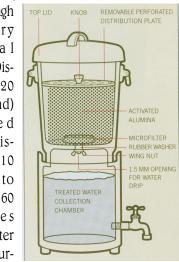


#### Fluoride ... Some may be good ... Too Much rots Teeth and destroys Bone

Here in the US, we drink water with fluoride added and are urged by our dentists to use fluoride toothpaste. However, in many parts of the world, fluorosis is endemic. Too much naturally occurring fluoride in the groundwater is rotting teeth and causing misshapen, brittle bones.

An article in the November issue of the *Rotarian* points out that fluoride occurs naturally in water throughout the world with several belts of high groundwater concentrations. One of these belts stretches from Eritrea to Malawi and another from Turkey through Iraq, Iran, Afghanistan, India, northern Thailand and China. The World Health Organization estimates that almost one-tenth of the global disease could be prevented by improving water supplies, sanitation, hygiene and management of water resources.

Through a Rotary G I o b a I Grant, District 1020 (Scotland) w o r k e d with District 3110 (India) to provide 60 f a m i I i e s with water filters. Cur-



rently, Scotland is researching another fluoride filter project that would provide filters to 400 families. Global Grants are new, and information on them can be found at **www.rotary.org/futurevision**.