

Chemistry Nobel Laureate to Visit Charlotte

By Amy Krakovitz

Prof. Martin Chalfie, recipient of the 2008 Nobel Prize in Chemistry, will be coming to Charlotte on September 10 as part of the Echo Foundation's "Celebrate the Power of One!" award gala, panel discussion, and student dialogue.

The odd thing about Chalfie's award is that he is a biologist, though, not a chemist. But this irony fits well within his view of how non-scientists perceive the sciences and scientific experimentation.

"We learn about these great names – Newton, Einstein, Fleming, and others – and we get these notions that aren't accurate," he says. Like that scientists are geniuses with an innate ability for discovery; that they are somehow different from the rest of us. Or that their experiments work all the time. We rarely hear about scientific failures (which are very valuable for the scientist). That scientists think differently from the rest of us, and that they work alone, in a vacuum. And finally, it would appear that successful scientists are all white men.

The student dialogue at UNC Charlotte on September 10 is geared to dispel these fallacies. Prof. Chalfie will be joined by Prof. Peter Agre, recipient of the 2003 Nobel Prize in Chemistry. Prof. Agre is also a biologist and the two Nobel Laureates will participate with nearly 1,000 students from UNC Charlotte and area high schools. Their dialogue will mesh with the evening's panel discussion on "The Future of Science," a key element in The Echo Foundation Voices Against Indifference STEM Initiative. Dr. Derek Raghavan, president Levine Cancer Institute at CHS, and member of Temple Beth El, will moderate.

Prof. Chalfie has other myths to dismiss as well. He wants potential students of science to understand that all your accomplishments in high school don't have to be perfect. He, in fact, did not get exemplary grades in high school chemistry or physics. In his senior year of college, he even tried out various subjects outside of the sciences, including law courses, literature courses, and theatre courses. But he eventually followed his main interest in biology.

He has an easy way of talking and relating to a non-scientist and a charming self-disparagement that one might not associate with a Nobel Laureate. He tells the story of the day he received the prize.

"You know, if you're fortunate enough to do good work, people do this terrible thing to you — they start saying, 'Hey, you might get the Nobel Prize.' Then, when the first week in October rolls around, you lose a little sleep.

"Last October, I didn't sleep

well the night before they announced the medicine prize. But no call came. They announced the chemistry prize two days later. Well, on that night, I heard this phone ringing in the distance but assumed it was a neighbor's. So I woke at 10 after 6 the next morning and assumed the chemistry prize had gone to someone else. I then opened my laptop and went to Nobelprize.org to see who the schnook was who'd gotten it. And there I saw my name along — along with Osamu Shimomura's and Roger Tsien's. I was the schnook!" (From an interview with *The New York Times*, September 21, 2009)

rabbi. The one he did find contacted him when he received the Nobel Prize to let him know that he was, in fact, the second Nobel Laureate that he had married.

Prof. Chalfie's wife, Tulle Hazelrigg, is also a professor of Biogeochemical Sciences at Columbia. It was some of her work that he used in the study that earned him the Nobel Prize. He worked along with Osamu Shimomura and Roger Y. Tsien in discovering the GFP (green fluorescent protein), a naturally occurring substance in a certain species of jellyfish. But he include some of his wife's experimental results in his study, with her permission. She included some requirements when granting that permission and has he says now, "We still debate whether these conditions were actually met." (See picture of her permission letter on this page.)



Prof. Martin Chalfie

Richardson and The Echo Foundation Family Legacy Award to Walter Cramer. The Family Legacy Award will be accepted

by Cramer's grandson, Kurt Waldthausen, on behalf of Cramer, who publicly condemned Hitler's persecution of Jews and joined his friend, Carl Goerdeler, the mayor of Leipzig, Germany, in the July 20, 1944 failed attempt on Adolf Hitler's life. A reception will follow at the Foundation For The Carolinas.

Tickets for the awards event and reception are available by calling The Echo Foundation at 704-347-3844. ✪



The famed letter of permission from Prof. Chalfie's wife, Dr. Tulle Hazelrigg. She is pictured here with their daughter, Sarah.

The student dialogue with Professors Martin Chalfie and Peter Agre will take place at McKnight Auditorium on the UNC Charlotte campus from 9-11 AM on September 10. The Panel Discussion on "The Future of Science" will take place at McGlohon Theater in Spirit Square from 6-7:30 PM. Dr. Derek Raghavan, president, Levine Cancer Institute at CHS and member of Temple Beth El, will moderate.


The discussion will precede the awarding of The Echo Foundation Award Against Indifference to Jerry

The easy use of Yiddish comes authentically, as Martin Chalfie is the grandson of Ashkenazi Jews, three of whom immigrated to the US from Eastern Europe (one grandparent was born in the US). The family celebrated the major holidays and Chalfie and his brothers all attended Hebrew School and were Bar Mitzvahed.

One moment from his childhood stood out for him. "I ... remember coming out of Temple during the High Holy Days and hearing her (his maternal grandmother, Madeline Friedlen) say that the entire story about Abraham's willingness to sacrifice Isaac was ridiculous. She thought that any person that would give up their child for any reason was just nuts. This was my first introduction to questioning religious belief, and it stuck with me." While he hesitates to draw a straight line from questioning dogma to the scientific curiosity that made up his life, it seems that looking at things with a new perspective was instilled in him at a young age.

One of the things he says he has always appreciated about Judaism is what he calls "common sense" and what the rest of us call "pekua'h hanefesh." The idea that no law is above the health or life of any one person gives Judaism "an element of sanity," like having "an escape clause for your well-being."

Judaism meant so much to him that, though his wife is not Jewish, he wanted to be married by a



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