We honor you Bill today in your own home town, Champaign, Illinois

Our heartiest congratulations

on receiving

The 2010 Lifetime Achievement Award of the Rebeiz Foundation

September 10, 2011

Who is this man ?

- **William L. Ogren**
  Plant Physiologist, a Biochemist, and a Great Human Being

- ✓ **Former Director, United States Department Of Agriculture (USDA) /Agricultural Research Service (ARS): Photosynthesis Research Unit (PRU) on the campus of the University of Illinois at Urbana-Champaign (UIUC); Professor in Agronomy and Plant Biology at the UIUC**
- ✓ **Research: Regulation, enzymology and specificity of ribulose bisphosphate carboxylase oxygenase (RUBISCO)**

- **1961: B.S., University of Wisconsin**
- **1965: Ph.D., Wayne State University**
- **1986: Member, National Academy of Sciences (Plants, Soil and Microbial Sciences)**
- **1986: Recipient, American Society of Plant Biology (ASPB) Charles F. Kettering Award for Excellence in Photosynthesis Research**
- **1990: Recipient, Alexander von Humboldt Foundation Award**
- **1990-1991: President, ASPB, 1990-1991**
- **1997: Inductee, ARS Science Hall of Fame**

Bill and I taught a course on “Photosynthesis”, and we had great fun… Several of our students became professors elsewhere and remembered his thorough lectures. They respected him for what he gave them --

William L. Ogren was inducted in 1997 in the Science Hall of Fame of the Agricultural Research Service (ARS)

Retired plant physiologist William L. Ogren worked in the ARS Photosynthesis Research Unit at Urbana, Illinois. He is a pioneer in discovering how plants use sunlight. His research on photosynthesis helped to make it a key factor worldwide for crop improvement strategies. He worked as a plant physiologist in the Photosynthesis Research Unit at Urbana, Illinois.

I remember what Bill wrote for the Millennium Issue of Photosynthesis Research in 2002 that I edited: He told his story, but he mostly recognized others: some of them are in the "key words"—His humility gives him away anywhere!

Photosynthesis Research **76:** 53–63, 2003.

Personal perspective

Affixing the O to Rubisco: discovering the source of photorespiratory glycolate and its regulation

William L. Ogren
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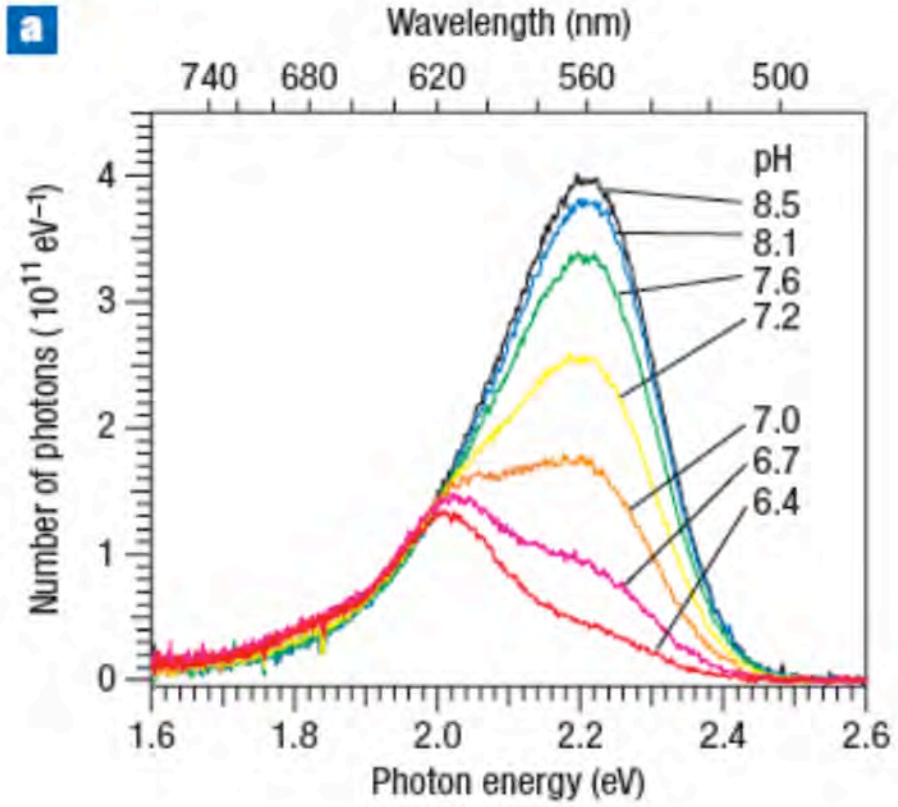
Key words: Arabidopsis, carbon dioxide compensation point, George Bowes, Douglas Jordan, William Laing, Jerome Servaites, Christopher Somerville, Jack Widholm, oxygen inhibition, photosynthesis, soybean

I vividly remember a talk by Bill Ogren; there, he showed that the color of bioluminescence from the luciferin-luciferase system changed depending upon the pH (see Seliger and McElroy (1964) The color of firefly bioluminescence: Enzyme configuration and species specificity, Proc Natl Acad Sci USA 52: 75—81). The picture of Bill standing and showing beautiful light of two different (yellow-green and red) colors from this system comes to my mind's eyes every time, I show red chlorophyll a fluorescence from leaves, or "Celestial Blue" from tonic water!

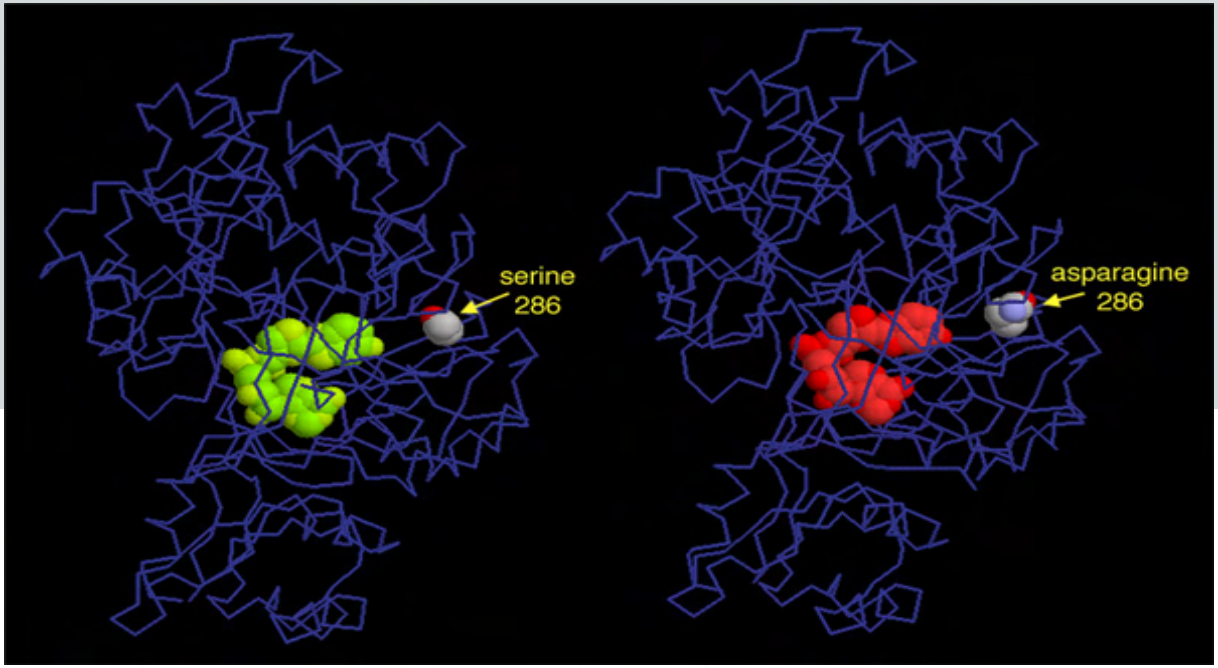
Just for Bill

Ando et al. (2008) have now provided spectra, lifetime of fluorescence, etc, etc on what I remember Bill showed us visibly.

Reference: Ando et al. (2008) "Firefly luminescence quantum yield and colour change by pH-sensitive green emission. Nature Photonics 2: 44-47.



Also Just for Bill.. Have Fun… : The End



Luciferase

June 2006 Molecule of the Month by David Goodsell

doi: 10.2210/rcsb_pdb/mom_2006_6 (PDF Version)

Left: Structure of luciferase from a Japanese firefly; it emits a greenish-yellow light. If serine is changed to an asparagine, the color changes to red (right); this change is a fair distance from the luciferin, and the color change is thought to be caused by slight changes in the packing of amino acids and a change in the flexibility around the luciferin---remember the pH experiment.

Here is Govindjee talking about Bill Ogren

Bill is telling Govindjee about his research life after the talk