

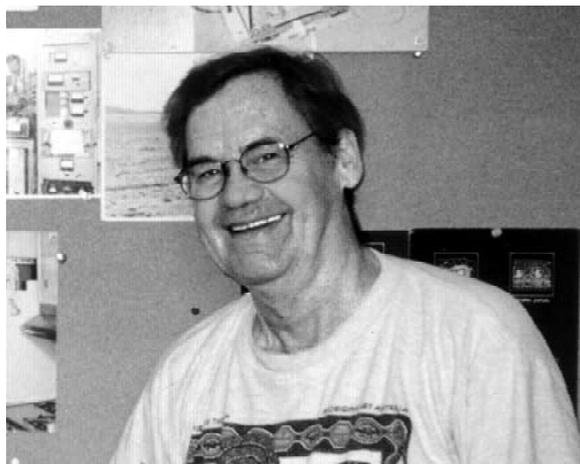


*Announcement*

## Our greetings to Olle Björkman, Christopher Field, and Alexander Glazer

It is a pleasure for me to announce to the photosynthesis community honors received by Olle Björkman, Christopher Field, and Alexander Glazer. Olle received the 2001 Charles Reid Barnes Life Membership Award of the American Society of Plant Biology, whereas Chris and Alex were elected, in 2001, to the prestigious National Academy of Sciences of the United States of America. A brief description and a photo of Olle, Chris and Alex follow.

On behalf of the Editorial Board of *Photosynthesis Research*, I extend heartfelt congratulations to Olle, Chris and Alex. We all are proud of your achievements.



Olle Björkman

### Olle Björkman

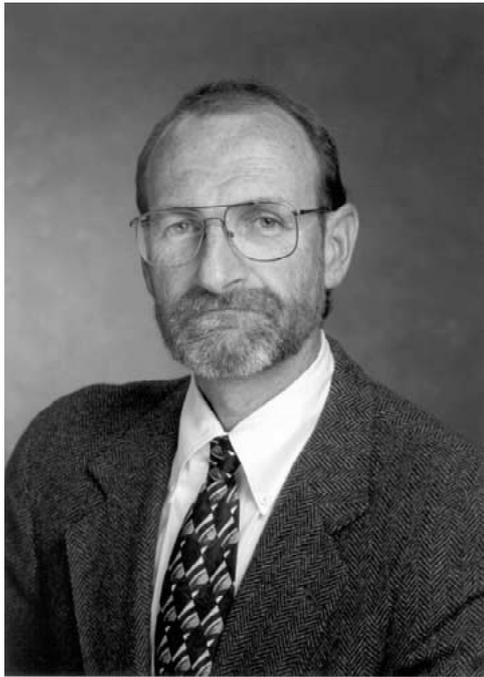
Olle Björkman, who was born in Sweden, came to the Carnegie Institution of Washington's Department of Plant Biology at Stanford in 1960, after receiving a PhD from the University of Uppsala. After post-doctoral research for three years, he was appointed to the faculty in 1964. Olle is best known for his pioneering research on the biochemical and physiological

strategies and mechanisms that plants adopt to live (1) efficiently in the *sun* and the *shade* environments, (2) at high temperatures, and (3) in excess light. He is a member of the National Academy of Sciences of the United States of America, fellow of the American Academy of Sciences and Arts, foreign member of the Australian Academy of Sciences, and of the Royal Swedish Academy of Science, recipient of the Linnaeus Prize, and the Stephen Hales Award, among other honors. Olle was honored recently with a special issue of *Photosynthesis Research*, Volume 67, Nos. 1–2, pp. 1–156, 2001, edited by A.R. Grossman, C.B. Field and J.A. Berry. The Charles Reid Barnes Life Membership Award, the oldest award (since 1925) of the American Society of Plant Biology, recognizes “meritorious work in plant physiology and is given to an individual who is at least 60 years old”. The citation includes: “His impact on the ecological side of plant physiology has been monumental.”

Congratulations Olle: your smile has a peaceful and pleasant effect on all who have met you, and your ideas and concepts continue to fire all those who come near you. Your humility and unpretentious nature have had a great impact on many who have come in contact with you.

### Christopher Field

In his PhD studies in plant ecophysiology at Stanford, Chris developed an evolutionary approach to understanding the spatial organization of plant canopies and the adaptive significance of leaf aging. With faculty positions at the University of Utah, starting in 1981, and the Carnegie Institution of Washington, starting in 1985, he explored the role of nitrogen in regulating plant growth and photosynthesis. These studies suggested ways that plant physiological responses could be summarized with a few parameters, providing a basis for predicting ecosystem function at very large scales. One branch of Chris' recent work has built on



Christopher Field

these principles, using models that simulate ecosystem exchanges of carbon, water, and energy at the global scale. The other branch tests and extends the simulation models with experimental studies on 'model' ecosystems, chosen to provide unusual tractability or access to critical ecological problems. In addition to his work at the bench and computer screen, Chris has nurtured the emergence of global ecology as a new discipline.

Congratulations Chris: your simple and quiet manners, your thoroughness and thoughtfulness are much appreciated by your scientific colleagues and friends.

#### **Alexander N. Glazer**

Continuing research initiated in 1970 during a sabbatical year with Roger Stanier, Alexander Glazer has masterfully elucidated the molecular architecture and the energy transfer pathways of phycobilisomes, the large multisubunit light-harvesting complexes of cyanobacteria and red algae. He and his co-workers delineated the features of phycobilisome structure that lead to highly directional transfer of excitation energy to the terminal acceptors within these complexes. In subsequent work, he focused on phycobilisomes of



Alexander N. Glazer

open-ocean unicellular cyanobacteria specialized for the absorbance of green light. These organisms are frequently found at considerable depth where such light predominates. Glazer and his co-workers showed that constitutive adaptation in these phycobilisomes results from the selection of the appropriate tetrapyrrole prosthetic groups that absorb maximally in the green but that are accommodated entirely within the structural protein framework seen in the phycobilisomes of freshwater cyanobacteria. His research has also led to the use of phycobiliproteins as fluorescence tags of choice for cell-surface markers. Glazer is the recipient of the Endeavour Prize, 1955, and the Darbaker Prize, 1980, among other honors, and is a Fellow of the American Academy of Arts and Sciences. He is now director of the University of California Natural Reserve System, and with characteristic insight and dedication, is encouraging expansion of courses in environmental sciences and initiation of multidisciplinary landscape-scale basic research studies to provide the knowledge needed for sound management of natural resources. The breadth of his scholarship and his understanding of biology from molecules to ecosystems are evident in these initiatives.

Alex, please accept the congratulations from the photosynthesis community at large. They marvel at your research.

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**Alphabetical list of members of the National Academy of Sciences, USA**, whose research has been related to photosynthesis in one form or the other. Deceased members are listed at the bottom of the page. (Compiled by Govindjee, December 10, 2001.)

Names are followed by the year of election and area.

ARNOLD, William A. (1962; Plant Biology)  
ARNTZEN, Charles J. (1983; Plant Biology)

BEEVERS, Harry (1969; Plant Biology)  
BENDER, Michael (2001; Geophysics)  
BENSON, Andrew A. (1973; Plant Biology)  
BJÖRKMAN, Olle (1979; Plant Biology)  
BOGORAD, Lawrence (1971; Plant Biology)  
BOYER, John S. (1990; Plant Biology)  
BOYER, Paul D. (1970; Biochemistry)  
BUCHANAN, Bob (1995; Plant Biology)

CHANCE, Britton (1954; Biochemistry)  
CLAYTON, Roderick K. (1977; Plant Biology)

DEISENHOFER, Johann (1997; Biophysics; Foreign Associate) (lives in USA)  
DUYSSENS, Louis N. M. (1977; Plant Biology; Foreign Associate)

EL-SAYED, Mostafa A. (1980; Chemistry)

FEHER, George (1975; Biophysics)  
FIELD, Christopher B. (2001; Environmental Sciences and Ecology)  
FRECHET, Jean M.J. (2000; Chemistry)

GANTT, Elisabeth (1996; Plant Biology)  
GIBBS, Martin (1974; Plant Biology)  
GLAZER, Alexander N. (2001; Biochemistry)

HASELKORN, Robert (1991; Plant Biology)  
HATCH, Marshall D. (1990; Plant Biology; Foreign Associate)  
HUBER, Robert (1995; Biochemistry; Foreign Associate)

JAGENDORF, André (1980; Plant Biology)  
JEFFREY, Shirley W. (2000; Plant Biology; Foreign Associate)  
JOLIOT, Pierre (1979; Plant Biology; Foreign Associate)  
JORTNER, Joshua (1997; Chemistry; Foreign Associate)

KAISER, Wolfgang (1989; Engineering Sciences; Foreign associate)

KAMEN, Martin D. (1962; Biochemistry)  
KATZ, Joseph (1973; Chemistry)

LORIMER, George H. (1997; Plant Biology)

MARCUS, Rudolph A. (1970; Chemistry)  
MEDINA, Ernesto (1992; Environmental Sciences and Ecology; Foreign Associate)  
MEYER, Thomas J. (1994; Chemistry)  
MICHEL, Hartmut (1996; Biophysics; Foreign Associate)  
MYERS, Jack (1975; Plant Biology)

OGREN, William L. (1986; Plant, Soil, and Microbial Sciences)

PORTER, George (Porter of Luddenham, Lord) (1974; Chemistry, Foreign Associate)

REES, Douglas C. (2000; Biophysics)

SANPIETRO, Anthony (1983; Biochemistry)  
SOMERVILLE, Christopher R. (1996; Plant Biology)  
STUMPF, Paul K. (1978; Plant Biology)

VON WETTSTEIN, Diter (1981; Plant Biology; Foreign Associate) (lives in USA)

*Deceased Members* (a partial list; contains birth and death dates, and year of election)

ARNON, Daniel (Nov. 14, 1910–Dec. 20, 1994; elected in 1961)  
CALVIN, Melvin (April 8, 1911–January 8, 1997; elected in 1954)  
EMERSON, Robert (Nov. 4, 1903–Feb. 3, 1959; elected in 1953)  
FRENCH, C. Stacy (Dec. 13, 1907–Oct. 13, 1995; elected in 1963)  
FRANCK, James (Aug. 26, 1882–May 21, 1964; elected in 1944)  
HILL, Robert (April 2, 1899–March 15, 1991; elected Foreign Associate in 1975)  
KOK, Bessel (Nov. 7, 1918–April 27, 1979; elected in 1974)  
WILSTÄTTER, Richard (August 13, 1872–August 2, 1947; elected Foreign Associate in 1926)  
WOODWARD, Robert B. (April 10, 1917–July 8, 1979; elected in 1953)