

André Tridon Jagendorf

(Currently Liberty H. Bailey Prof Emeritus, Plant Biology , College of Agriculture and Life Sciences, Cornell University), co-recipient, with Wolfgang Junge , of 2012 Lifetime Achievement Award of The Rebeiz Foundation of Basic Biological Research

**A Tribute to
My elder brother, Andre Bhaiya
by
Govindjee**

September 28, 2013

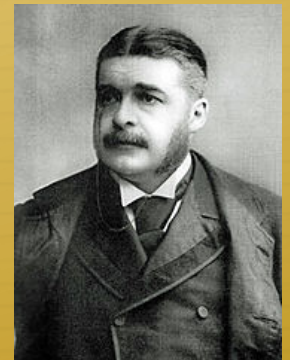
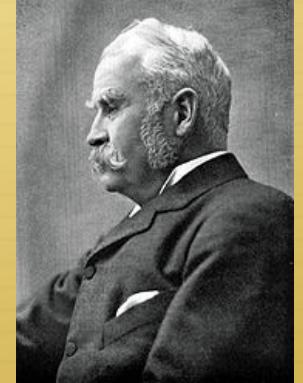
gov@illinois.edu

URL: <http://www.life.illinois.edu/govindjee>

Delivered by Govindjee at the Rebeiz Foundation for Basic Biology, Champaign, Illinois

Andre T. Jagendorf (ATJ) in 1946.. with his friend Avnet
and his girl friends

A way of academic life: From one celebration to
another, 67 years later ..From Cornell to Champaign



I have learned that ATJ used to listen to Gilbert and Sullivan's
operettas on the radio

Govindjee



Some facts about André



- ✧ **Born: October 21, 1926 , New York City**
- ✧ **Son of Moritz Adolph and Sophie Sheba (Sokolosky); his father was a dentist and children's book writer; mother was an accomplished and a wonderful person**
- ✧ **He learned to type when he was very young; was an avid reader of books especially Science fiction**
- ✧ **At young age, he was enamored by classical music; played “mandolin”; and then viola till 1966.**

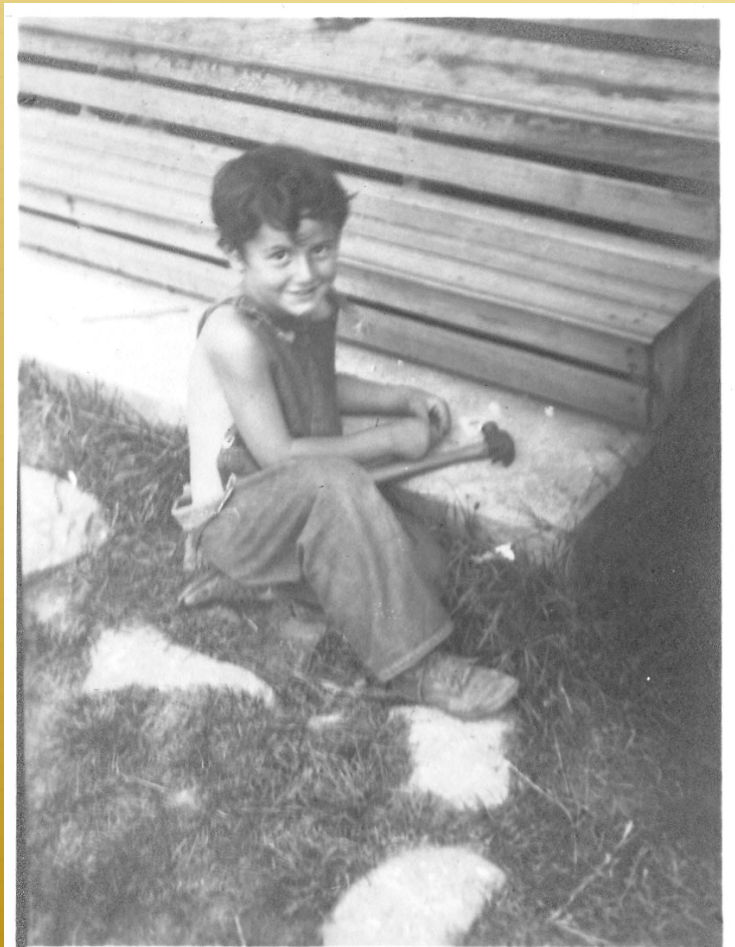
Some facts about André



Andre and Jean Jagendorf as they were on September 17, 2013, before the Pizza dinner at Tino and Carole Rebeiz's home In Champaign, Illinois

- ✦ Married on June 12, 1952 to Jean Elizabeth Whitenack
- ✦ They have 3 children: Suzanne; Judith; and Daniel; 8 grand children; and 6 great grand children
- ✦ BA : Cornell, **Plant Physiology**, 1948; PhD (**David Bonner**; James Bonner; Sam Wildman; Bernard Axelrod) : Yale, 1951:Merck Fellow (**with Sam Wildman**) : UCLA, 1951-1953; Johns Hopkins, 1953-1966; Cornell, 1966—
- ✦ **1980:Member, US National Academy of Science and has many many honors**

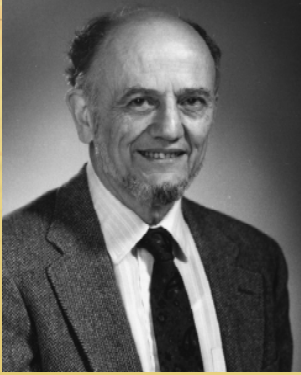
André has followed the same rules from when he was 6 up to when he is 87



André 1932

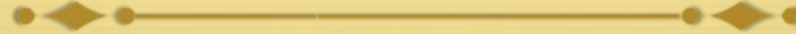
Take a hammer and hit it at the right place..

His ability to think for himself was obvious when he created, with available blocks and boxes (big and small), a 2-story "ship", with stairs going up the planks laid on top of a big box. His kindergarten teacher had never seen anything like it!



André Tridon Jagendorf
(Courtesy of Division of Rare & Manuscript
Collections, Cornell University Library)

I will not talk about his research. You can read about it in the two articles I had invited him to write for “Photosynthesis Research”



- ✦ Jagendorf, A.T. (1998) Chance, luck and photosynthesis research: An inside story. *Photosynth Res* 57: 215-229
- ✦ Jagendorf, A.T. (2002) Photophosphorylation and the chemiosmotic perspective. *Photosynth Res* 73: 233-241
- ✦ Andre recognized many, particularly the following three:

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Mordhay
Avron

Figure 1. Mordhay Avron.

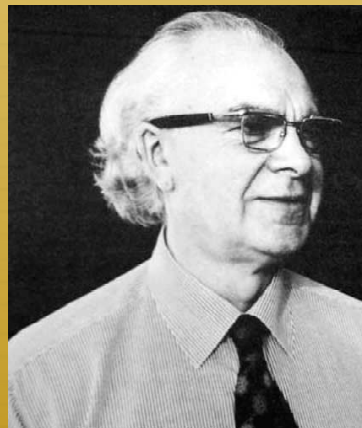


Figure 2. Peter Mitchell.

Peter
Mitchell

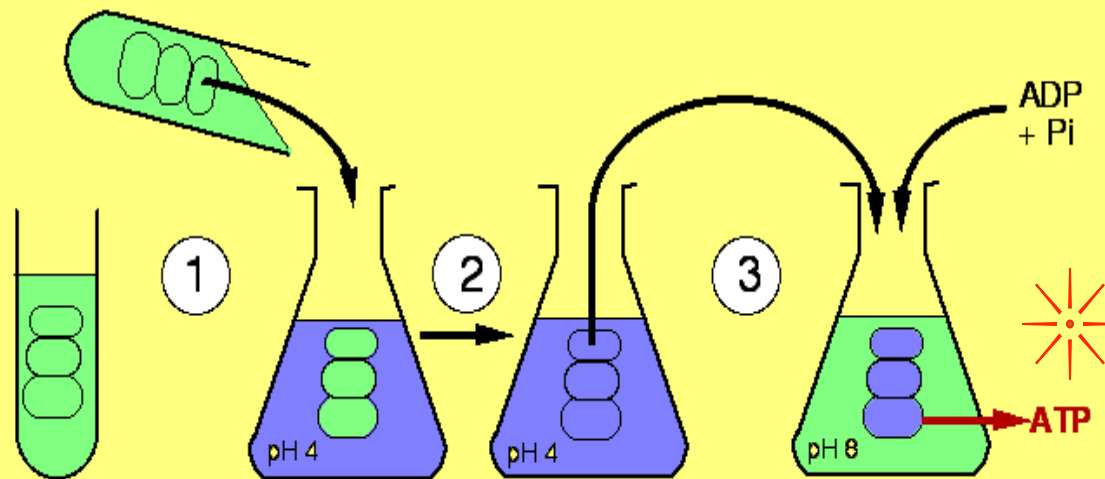
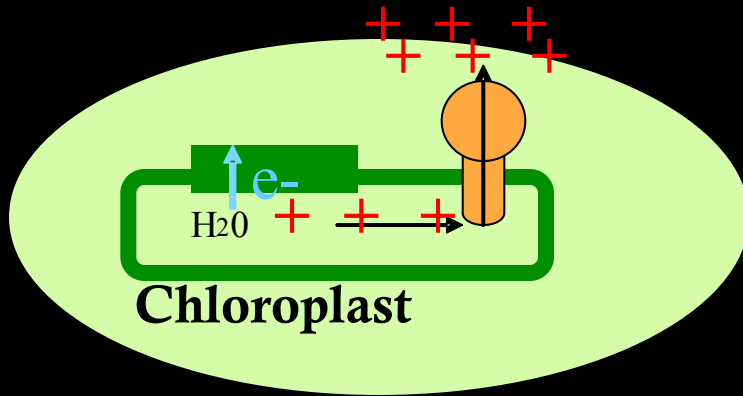


Figure 3. Geoffrey Hind.

Geoffrey
Hind

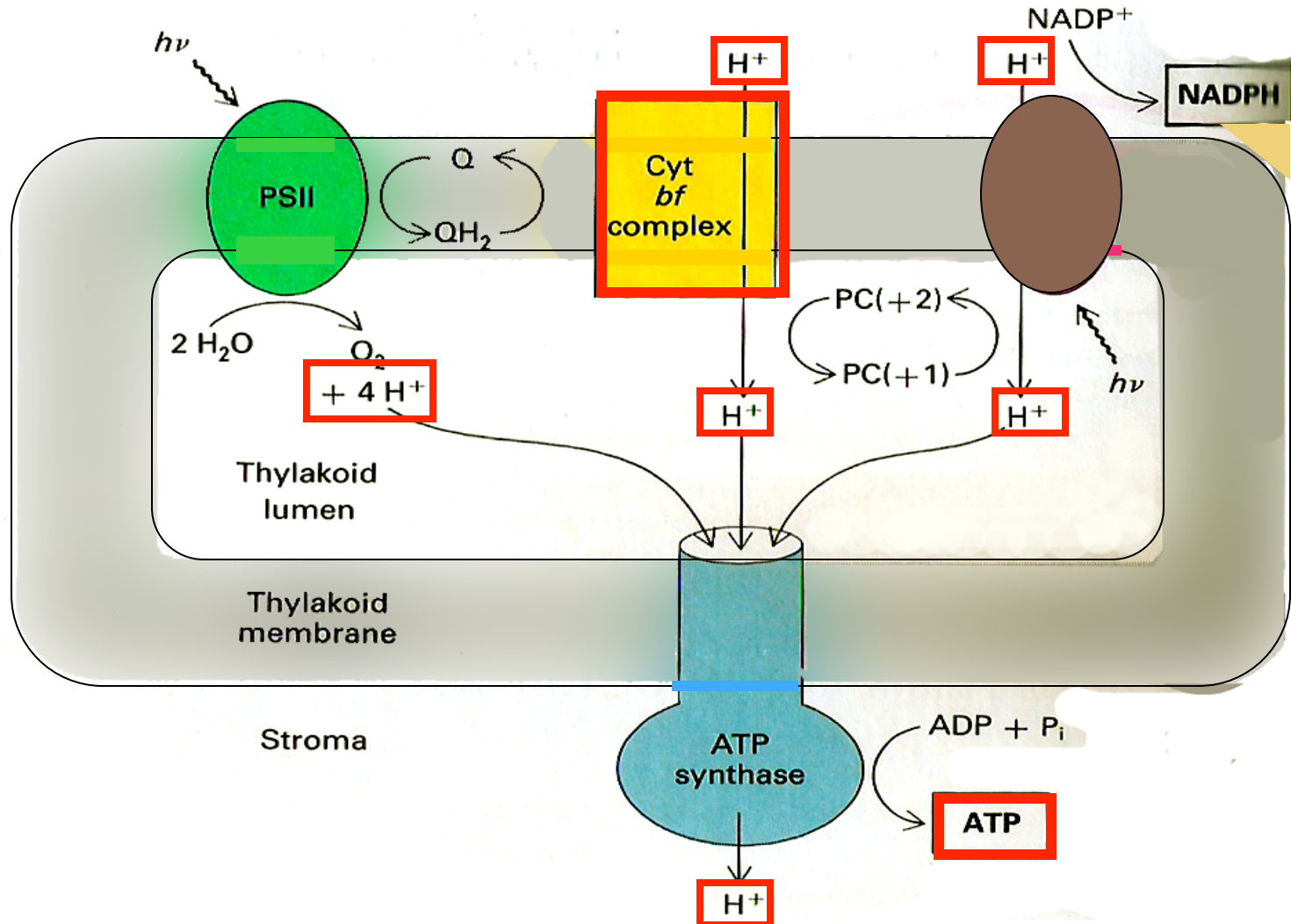
Chemiosmotic Mechanism for ATP Synthesis

Jagendorf's chloroplast work provided powerful support for Peter Mitchell's theory for ATP generation

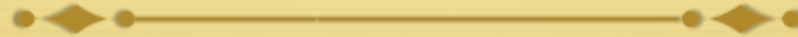


Andre T. Jagendorf

A Proton Gradient Generates ATP in Chloroplasts



Some quotes from Jagendorf (1998)



- ✦ “The probability of any one event occurring is amazingly small; in retrospect, each step seems like a minor miracle. Any person’s career has to be shaped by interactions with other people;”
- ✦ “...doing science is fun”
- ✦ “I had heard Peter Mitchell talk about chemiosmosis at a bioenergetics meeting in Sweden. His words went into one of my ears and out the other, leaving me feeling annoyed they had allowed such a ridiculous and incomprehensible speaker in. But – Geoffrey read Nature. Geoffrey was from England, both better trained and more intelligent than I was. He read Peter Mitchell’s paper, came to me, and said ‘André. could this possibly explain X_E [something that preceded ATP formation]?’”

Some more quotes from Jagendorf (1998)



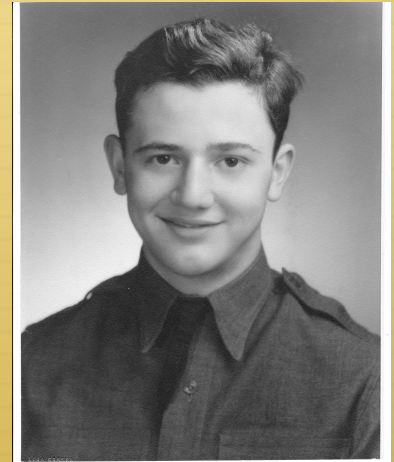
- ✧ “At this point I began to communicate with Peter Mitchell himself... and invited me to spend a week there so he could educate me about the chemiosmotic hypothesis in more detail. I was happy to go, and enjoyed very much meeting his family and the **family donkey**, andI doubt that I learned enough about chemiosmosis, however. “
- ✧ “Later that summer I did the experiment that convinced me ...that we were really seeing a chemiosmotic mechanism at work. The amount of ATP that was made depended on the height of the pH difference between acid and base stages, more than on their absolute values (Jagendorf and Uribe 1966).”

1941--1951

1941:
With
Albert
Novikoff
(Fake bar)



A 1945 photo.
Enlisted
In US Army
In
1944; learned
to be a
photographer



ATJ

1950:
At Yale

We can recognize
him here



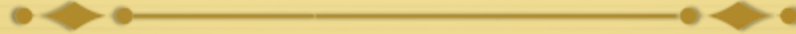
1951:
Happy
Graduate
From Yale



1953-1966

Johns Hopkins University

Appointed in 1953 by Willian McElroy without any interview!



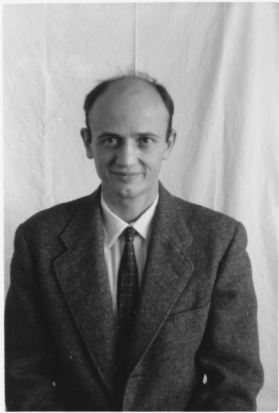
- ✦ 1955 Photo: With the late Tony San Pietro and the late Mordhay Avron, major discoverers in biochemistry of photosynthesis

A S-P



ATJ

M A



MARYLAND ACADEMY OF SCIENCES

NEWSLETTER

VOL. 4, NO. 2

BALTIMORE, MARYLAND

NOVEMBER, 1961

Dr. Andre Jagendorf Cited as Maryland's Outstanding Young Scientist for 1961

Dr. Andre T. Jagendorf, associate professor of biology at The Johns Hopkins University, was honored as Maryland's "outstanding young scientist" of 1961 at ceremonies at the Lyric Theatre on October 6.

Dr. Jagendorf, 36, was cited for his "outstanding work in plant physiology and biochemistry and specifically for contributions in the study of photosynthesis."

Governor J. Millard Tawes, serving in a dual capacity as governor of the State and a member of the Academy's board of trustees, presented the young biologist with a plaque and a \$500 cash grant.

In making the presentation, Governor

Tawes noted that the judges selected Dr. Jagendorf from seventeen nominees.

"I should like to compliment the Academy for establishing this award to spur the interest of young people in science and to gain national recognition for Maryland in this field," he said. "Certainly in these times, when the survival of human beings may be determined by the progress we make in scientific endeavor, any effort to generate interest and activity in scientific research is a commendable deed."

The Governor pointed out that the

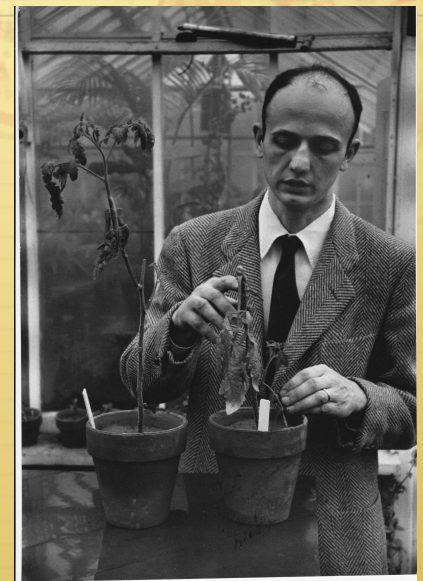
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Dr. Andre T. Jagendorf (left) receives Outstanding Young Scientist plaque from

1960s

1961: Maryland Academy



1962: Johns Hopkins.

1961: Johns Hopkins



1963: Airlie House, Virginia (B. Kok and A.T. Jagendorf):

ATJ Nobel laureate James Franck was also there (standing, 2nd from left). Govindjee



Congratulations André



- ✧ I thank Tino Rebeiz for giving me the opportunity to show my happiness, through my slides, at this gathering about André as a person—
- ✧ The only request to André is that he holds back his “off-color” jokes (that many of us really love) for a few minutes—may be at least an hour! OK??
- ✧ Thank you all who have gathered here today to honor two extraordinary persons (Andre and Wolfgang) . I will talk about Wolfgang a bit later. I am sure if Eugene Rabinowitch (my professor) was here, he will say “Well.. Let’s get some vodka.”