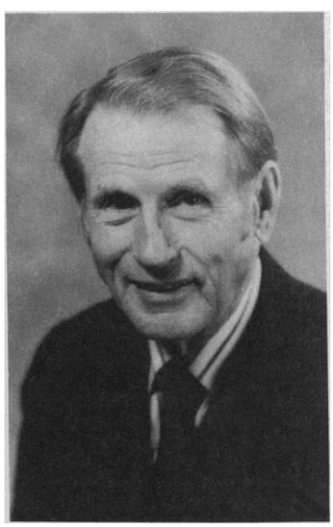
Random Samples:

Feeding the Hungry

It is a long way from a family farm in Maine to the rice paddies of the Philippines. But because Robert Chandler, Jr., walked that road, the 2 billion people of Asia were able to avoid devastating famine.

In the 1950s, experts were predicting widespread food shortages in Southeast Asia. Unless rice production increased by 5 million tons a year, they said, the rapid overpopulation of the area would lead to the deaths of millions of people. In 1959, Chandler, working for the Ford and Rockefeller foundations, set up and staffed the International Rice Research Institute in Los Banos, the Philippines. The institute quickly developed new strains of rice that dramatically increased the rice yield.

Today, IRRI rice varieties are grown on nearly 50 million hectares of Asian rice lands, and have increased yield 66%, while the population has grown only 47%. As a result, the number of malnourished people in Southeast Asia fell from about 40 million in the early 1970s to 27 million in the early 1980s. Not content with his success, in 1972 Chandler went on to found the Asian Vegetable Research and Development Center Taiwan, which has achieved similar results for vegetables.



Robert Chandler, Jr.

Last month, Chandler was honored for his work with the second annual $200,000 World Food Prize, created by General Foods to recognize outstanding contributors to improving the availability of food around the world. Nobel peace laureate Norman E. Borlaug, father of the "Green Revolution" in the developing nations, said Chandler's efforts had "made food available for billions of people in dozens of developing countries," and that Chandler had "blended science, teaching, and management to help expand the food supply for much of the world."

Now retired at age 81, Chandler has been a state agriculturist, an academic scientist, and a university president. And while he says he never had a job he didn't like, he says his most rewarding work was at IRRI. "It was tremendously challenging and stimulating," he recalls. "We really were able to start with a bang and to make a difference."

Chandler has visited the Philippines almost every year since he left and has corresponded with friends and colleagues there. He knew President Ferdinand Marcos and his wife Imelda well, and Chandler says he was "amazed to find [Marcos] milked his country that way. The Marcoses were always extremely cooperative and interested in our work." The Marcoses were indicted 23 October by a federal grand jury for embezzling more than $100 million from the Philippines treasury.

Authors, Authors!

In the 16 September issue (p. 1437) we reported on a paper in *Kansenshogaku Zasshi* that listed 193 Japanese authors from 20 institutions. What, we asked aloud, was the record for the most number of authors on a paper in a peer-reviewed journal?

The JET set seems to be the answer. Mike Collins, of the Institution of Electrical Engineers in Britain, drawing on the INSPEC database, cites "Confinement and heating of plasmas in the JET Tokamak," a 1986 paper in *Plasma Physics & Controlled Fusion*, which sports 246 authors. The JET group also published a paper entitled "JET latest results and future prospects" by 257 authors in the *International Atomic Energy Association's Conference on Plasma Physics and Controlled Nuclear Fusion* in 1986. The latter, however, is not strictly speaking a peer-reviewed journal.

David Clark

Charles Bracker of Purdue University's Department of Botany and Plant Pathology made a valiant effort with a 1987 paper in *Physical Review D* that lists 108 authors from 14 universities. Moreover, since most of the authors are Americans, Bracker says, "it does illustrate that Americans are in the running and that multiple authorship is one area in which the Japanese have not yet established a monopoly."

Collins, of INSPEC, also turned up some other interesting facts about scientific papers:

Shortest title: "!".

Longest title: 45 words.

Longest word in a title: "Rauchgasentschwefelungsanlagen." It means "flue gas desulfurization."

Most alliterative title: "Turning transducer triggers technique to tackle transformed torque." The same author had earlier authored the classic "Layering leisurely liquids leaves linear laminar flow languishing in line."

Shortest abstract: "No." The title was a question.

Longest mathematical formula: 16 pages.

Finally, pity the poor authors who suffered the longest editorial delay on record: 26 years, 5 months. The paper was received by the *Bulletin of the JSME*, a Japanese journal, 1 April 1960 and published in September 1986. Talk about author revisions!

Carlson's Oeuvre

"Someone once said that the difference between a scientist and an artist is the difference between discovery and creation. Another genius, some say, could have discovered Planck's Constant—for it was there to be discovered—but only Beethoven could have written Beethoven's sonatas. I think that Chet Carlson's achievement was more like Beethoven's."—Sol Linowitz, former chairman of the board of Xerox Corp., commemorating the 50th anniversary of the invention of the xerography process by Carlson.

■ GREGORY BYRNE