

DRXRO-MA  
SUBJECT: Third Army Wilks Award

21 July 1983

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Dr. Douglas Tang  
Chief, Department of Biostatistics/  
Applied Mathematics  
Division of Biometrics and Medical  
Information Processing  
Walter Reed Army Institute of Research  
Washington, DC 20012

Dear Committee Member:

It is time for us to choose a winner of the third Army Wilks award. There are seven names on this year's list - five are carryover names from last year. The guidelines currently allow us to keep each nominee on the active list for two years. If you can think of anyone you would like to add to the current file, please let me know as soon as you can.

The procedure for voting is for each member of the selection committee to vote for a first place winner, a second place winner and a third place winner. This cumbersome procedure is to give us enough information to break tie votes.

Frank Proshan was nominated again this year. We have agreed with the ASA Wilks selection committee not to present the Army/Wilks award to any previous winner of the ASA/Wilks award. This is not necessarily a permanent arrangement but can and should be resolved by a joint committee meeting.

A copy of the revised ground rules are enclosed for your convenience. Mr. Philip Rust would like the winner of the award to be associated with the solution of an important (and presumably difficult) statistical or mathematical problem in one or more Army labs. This is a difficult and perhaps undesirable thing to put into the guidelines, because some day we might run out of eligible names. We should keep this desire of the donor of the award in mind. Since Sam Wilks is presumably the model for this award, the Army lab problem doesn't have to be completely solved especially if the problem is difficult enough.

Please try to send your votes to me by August 15. If that is too early, please let me know.



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If you have any important relevant information about any of this year's candidates, please inform the rest of us. In fact, if you have other good names for this year's award, let us know.

Thanks for your participation.

Sincerely,

Enclosure

ROBERT L. LAUNER  
Associate Director  
Mathematical Sciences Division



WILKS AWARD NOMINEES FOR 1982

CARRYOVER NOMINEES FROM 1981

Professor Richard Barlow, University of California-Berkeley  
Professor Robert Hogg, University of Iowa  
Professor Richard Johnson, University of Wisconsin  
Professor Emanuel Parzen, Texas A&M University  
Professor Nozer Singpurwalla, George Washington University

NEW NOMINEES

Dr. Marion Bryson, CDEC, Ft. Ord, California  
Professor H. A. David, Iowa State University



## BACKGROUND OF NOMINEES FOR 1983

### BARLOW

Methodology: Well known for his extensive work in reliability and applied probability. Co-author with Proschan of Mathematical Theory of Reliability, Statistical Theory of Reliability, and a text on Data Analysis in Reliability (to appear). Also Statistical Inference under Order Restrictions with Bartholomew, Bremner and Brunk.

Interactions: ARO contractor for nine years. Invited presenter at Tri-services review of mathematical sciences, 1983.

### HOGG

Methodology: Co-author of Introduction to Mathematical Statistics with A. T. Craig. Well known expositor on statistical robustness.

Interactions: Speaker at 22nd DOE and ARO Workshop on Robustness, 1980.

### JOHNSON

Methodology: Extensive work in statistical reliability. ARO contractor for two years (joint with ONR).

Interactions: Invited speaker at 24th DOE.

### PARZEN

Methodology: Introduced reproducing kernel Hilbert space methods to spectral analysis of time series. Wrote modern probability theory, book on stochastic processes, book on time series. Recently developed a complete theory for data analysis based on the quantile function.

Interactions: Invited speaker at the 14th DOE and ARO Workshop on Robustness, 1980. Recent important interaction with USAMMRC, Watertown, in analyzing failure data of composite materials used in special high stress applications based on his recently developed methods (supported by ARO - five years).



## SINGPURWALLA

Methodology: Well known for extensive work in reliability. Co-author of Methods for Statistical Analysis of Reliability and Life Data with Mann and Shafer. Also (to appear) book on Time Series with T. W. Anderson. Contributed to methodology for analyzing quantile data from kinetic energy penetrators at BRL.

Interactions: Invited speaker at 22nd and 27th DOE, and ARO/ONR Workshop on Reliability, 1981. Working group on K/E penetrators, 27th DOE meeting. Numerous interactions and discussions with Army personnel, especially BRL statisticians. Developed a new Bayesian method for estimating V-50 or any point on quantile function for KE penetrator data. Recently co-developed a Bayesian method for monitoring reliability of Pershing II test data. Gave special 5-hour tutorial on accelerated testing at XIV Army Operations Research Symposium, 1980. Gave 3-day tutorial at ALMC, 1983 for Army continuing education in OR program.

## BRYSON

Methodology: Analysis of dirty data from field experimentations. Formerly Associate Professor, Mathematics and Community Health Sciences, Duke University, 1958-68.

Interactions: Half-time position with ARO-D, 1958-68. Past president and member of the board of directors, Military Operations Research Society. Invited speaker DOE, 1974. Local host for 23rd and 28th DOE. Extensive general Army consulting during tenure at ARO.

## DAVID

Methodology: Director and Head, Statistics Department and Consulting Laboratory, Iowa State University. Well known for his Wiley book, "Order Statistics", now in its second edition. Co-author of Griffin monograph "The Theory of Competing Risks" with M. L. Moeschberger.

Interactions: Invited speaker at 5th and 20th DOE Conferences. Invited speaker at ARO Robustness Workshop, 1980. Provided theoretical details for a solution of a fuzing problem at BRL, 1981.





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August 1, 1983

Dr. Robert L. Launer  
Associate Director  
Mathematical Sciences Division  
U.S. Army Research Office  
Post Office Box 12211  
Research Triangle Park  
North Carolina 27709

Dear Bob:

This is in response to the request in your letter of July 21st to vote for the winner of the third Army Wilks award. My list is given below:

- 1) Singpurwalla
- 2) Barlow
- 3) Parzen

Next year I would like to propose the name of Dick Moore. I realize that this may cause some complications but to my mind it is well worth the try. I would be grateful if you would supply me with relevant documentation concerning Dick. Many thanks.

All the best.

Sincerely,

Robert Bechhofer  
Professor

pm



UNIVERSITY OF WISCONSIN-MADISON  
MADISON 53706

MATHEMATICS RESEARCH CENTER

610 WALNUT STREET  
TELEPHONE (608) 263-2661

August 9, 1983

Dr. R. L. Launer  
Mathematics Division  
Army Research Office  
P. O. Box 12211  
Research Triangle Park, NC 27709

Dear Bob:

My votes for the Third Wilks Award are:

First place: E. Parzen

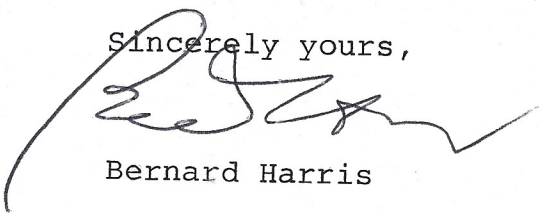
Second place: H. A. David

Third place: Nozer Singpurwalla.

As I explained to you on the telephone, my failure to cast a vote for Richard Johnson should not be interpreted in any negative way. It is simply that such a vote would constitute a conflict of interest.

I look forward to seeing you at the meeting.

Sincerely yours,



Bernard Harris

BH:gm



September 30, 1983

Mathematical Sciences Division

Dear Colleague:

The votes are in for the 1983 Army/Wilks Award. The winner is H. A. David with the votes being given as follows.

<u>Bechhofer</u>	<u>Harris</u>	<u>Launer</u>	<u>Moore</u>	<u>Tang</u>
Singpurwalla	Parzen	David	Bryson	Kurkjian
Barlow	David	Singpurwalla	David	David
Parzen	Singpurwalla	Parzen	Barlow	Singpurwalla

Thank you for serving on the committee. See you in Bethesda.

Sincerely,

Robert L. Launer  
Associate Director  
Mathematical Sciences Division





Statistical Laboratory and Department of Statistics | 102 Snedecor Hall | Iowa State University | Ames, Iowa 50011  
Telephone: 515-294-3440

October 21, 1983

Dr. Robert L. Launer  
Department of the Army  
U. S. Army Research Office  
P. O. Box 12211  
Research Triangle Park, N.C. 27709

Dear Dr. Launer:

As you know, I was extremely honored and pleased to receive the Wilks Army Award. In this letter I want to express my appreciation in writing, both in a general sense and also to you and the Selection Committee. In his very thorough introduction of me Bernie Harris said very little, perhaps deliberately, about the longterm support my work has been receiving from the Army Research Office. It so happened that as soon as I got to V.P.I. in 1957 I was placed on Boyd Harshbarger's Office of Ordinance Research Grant and I have received essentially continuous support ever since. I count myself extraordinarily fortunate in this regard and am most appreciative of the support given by yourself, Dr. Chandra, and earlier Dr. Dressel.

It was, of course, my pleasure to have an opportunity to express my high regard for Sam Wilks. Needless to say, I am also very grateful to the donor of the award, Mr. Philip G. Rust.

I do not know who was responsible for Mrs. Hartley's presence at the banquet. It was most thoughtful to think of her and I was very glad to have a chance to see her again. For me it was a memorable occasion. Again my thanks,

Sincerely yours,

Herbert A. David

HAD: jr

cc: Dr. Jagdish Chandra