# The Australian Women's Register

**Entry type**: Person **Entry ID**: AWE6057

# Barnard, Mildred Macfarlan

(1908 - 2000)

Born	1 January, 1908
Died	31 December, 2000
Occupation	Biometrician, Mathematician, Statistician

## Summary

Mildred Macfarlan Barnard was a statistician, mathematician and biometrician. She worked as an Assistant Biometrician in the Division of Forest Products at the Council for Scientific and Industrial Research (CSIR) from 1936-41. Mildred lectured at the University of Melbourne and the Women's College, and later at the University of Queensland. She was also the first woman to chair the Brisbane Branch of the International Biometrics Society, Australasian Region, in 1972.

#### **Details**

Mildred Macfarlan Barnard was the child of Richard James Allman Barnard who taught mathematics at Queen's and Ormond College before lecturing at Duntroon Military College. From 1922 to 1933 he lectured at Melbourne University. The family had been long established in Victoria: Mildred Barnard's grandfather owned a pharmacy where the old Kew Post office now stands.

Mildred Barnard excelled in mathematics, winning the Dixson Scholarship in 1931, graduating BA and BSc. She took her MA the following year and in 1935 attended University College, London where she wrote the three papers that were accepted for her PhD from the University of London.

Returning to Australia, she worked with Betty Allan (like her, an alumna of Melbourne Church of England Girls' Grammar School) as Assistant Biometrician in the Division of Forest Products of the CSIR from 1936 to 1941.[1] Her investigations covered such aspects as the holding power of coach screws and the serviceability over time of railway sleepers and telegraph poles. It has been noted that:

Barnard was quick to point out the defects in such practices as picking out average-looking trees and taking many samples from a few trees rather than the other way around, advocating that representative samples be a priority, that random samples be used wherever practicable, that stratification takes place whenever appropriate, and that samples should be reasonably large in relation to the variability of the characters of interest. She would also point out that before sampling a population or obtaining material for an experiment, it is generally wise to obtain the advice of a statistician! [2]

In 1939 she married and until 1956, when the family left for Queensland, she lectured part-time at both the University and Women's College. She lectured thereafter at the University of Queensland. Her *Elementary Statistics for Timber Research Workers*, twice printed for internal CSIR use, was formally published in 1956.[3] In 1972 she became the first woman to chair the Brisbane Branch of the International Biometrics Society, Australasian Region.

[1] For a brief description of Allan's life and work see Juliet Flesch and Peter McPhee. 160 Years 160 Stories. Melbourne: Melbourne University Press, 2013. p.4.

[2] J.B.F. Field, F.E. Speed, T.P. Speed & J.M. Williams. 'Biometrics in the CSIR: 1930-1940'. *Australian Journal of Statistics* . v. 30(B) (1988): 54-76.

[3] Mildred M. Barnard and Nell Ditchburne. *Elementary Statistics for Use in Timber Research*. Melbourne: Commonwealth Scientific and Industrial Research Organization, Australia, 1956.

# Published resources

#### **Book**

40 Years 40 Women: Biographies of University of Melbourne Women, Published to Commemorate the 40th Anniversary of the International Year of Women, Flesch, Juliet, 2015, <a href="http://www.womenaustralia.info/exhib/4040/">http://www.womenaustralia.info/exhib/4040/</a>

#### **Resource Section**

Barnard, Mildred Macfarlan (1908 - 2000), McCarthy, Gavan, 2004, <a href="http://www.eoas.info/biogs/P001596b.htm">http://www.eoas.info/biogs/P001596b.htm</a>

### **Author Details**

Juliet Flesch

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