Keynote Lecture

Professor Sir Patrick Bateson

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About the speaker

Professor Sir Patrick Bateson, FRS (born 1938) is a biologist and science writer. Bateson is emeritus Professor of Ethology at Cambridge University and president of the Zoological Society of London. He received his BA in zoology and PhD in animal behavior from Cambridge University. Previous academic positions include a Harkness Fellowship at Stanford University and ten years as head of the Cambridge sub-department of Animal Behaviour. He was elected a fellow of the Royal Society in 1983. Bateson is a research scientist and science populariser who has written many books and articles on ethology, animal welfare, measuring behavior, developmental biology and genetics, gives public lectures and broadcasts.

What new techniques for measuring behaviour would you die for?

Many of the classical examples that figured so strongly in the first text books on animal behaviour would not pass editorial scrutiny in the 21st century. Small samples, non-independence of measurements (when measurements were made), pseudo-replication, naïve or improper use of statistics (when statistics were used), lack of adequate controls (when experiments were carried out), not conducting experiments blind and generally using poor experimental design were all flaws in ethological work of that early period.Some of these inadequacies haven't been rectified. Dangers of unconscious data selection remain and not many behavioural biologists run their experiments blind. However, the lecture is intended to be forward-looking. I shall focus on where progress could be made in the efficient measurement of interesting aspects of behaviour without resorting to measurement of the merely trivial. The issues will range from the subtleties of choice experiments, through visualizing data, and discovering context and order in sequential streams of events, to the invention of devices for recognizing patterns in multidimensional arrays.