Statement on article Mother Superior? The Biological Effects of Daycare, published in *The Biologist*, a journal of the Society of Biology 58(3):28 -32.

Despite the fact that I have not been interviewed by any newspaper journalists, some news reports have distorted or exaggerated the nature and content of this article and I would like to make clear that I do not approve of this. Sensational news reactions are an unavoidable risk one takes when broaching sensitive and uncomfortable topics in a direct way.

Claims that the article misrepresents individual studies fail to acknowledge the obvious focus and intent of the article, which is to point to deleterious links within and between studies and providing the reader with a reference to find out more detail.

To prevent any misrepresentation of this article, it is important that the following is understood:

The Society of Biology defines *The Biologist* as a 'fully peer-reviewed and citation-listed journal', to include articles on 'controversial issues.' And as such I have written about a controversial issue. The paper was peer-reviewed and it was decided that 'The general thesis of the paper is sound'. *The Society of Biology* has made it clear' "Dr Sigman's work is based on reputable research from respected scientific journals".

The express intent of this article is to provide readers with the under-acknowledged and often uncomfortable findings of bioscience studies on daycare. I selected studies that were generally negative precisely because most biologists and policy makers are unaware of the existence of these studies. The intent is to redress an existing imbalance in the perception of daycare as a 'complex, waiting to be understood - but at the moment benign' lifestyle practice. An article of this type cannot possibly deal with all the various viewpoints and complexities involved in the area and so by definition the article is limited to the main thrust of my argument.

The article includes not just a consideration of daycare and cortisol but related aspects of early child care including the association between early maternal care and later neuroendocrine changes, particularly early programming of the HPAA, as well as early care, later attachment style and later neuroendocrine function. I have pointed to connections between diverse areas of research and offered justified speculation as to the potential long-term consequences of early care on a large number of children.

Few stop to consider that day care is an evolutionary novelty, which has grown suddenly and rapidly. In other areas of child health and development, when considering the potential effects of profound new developments, our society instinctively adopts a principle of precaution. This has not been the case with daycare. The accepted position at the moment considers daycare attendance as an accepted healthy practice which both scientists and society must consider equivalent in terms of child wellbeing and later development. While of course the long-term effects of daycare and cortisol release are

not fully understood, emphasising the possible negative implications in keeping with our tradition of a principle of precaution is justified and prudent. In the case of early child care we should remind ourselves that when it comes to an issue of such fundamental importance, we must invoke the Hippocratean medical principle of "first do no harm", and subscribe to an a priori assumption that generally maternal care during early child development is better than daycare for child wellbeing and later development. Moreover, it should be incumbent on those with an open mind on this matter to provide overwhelming evidence that paid daycare workers can elicit the same intimate and often unique interactions that occur between mothers and babies.

Beyond the academic sphere of publish or perish exclusively evidence-based judgments of daycare, lies the responsibility to advise on what is probably better for child health and development as it stands at present. Such guidance should err on the side of caution. And while open-mindedness has its place in academia, it is a luxury children can't afford. A rather perverse situation where an open mind can be a dangerous thing.

Declared Interests: I have written this paper purely out of concern for and interest in child development. I have received no funding of any sort for this undertaking nor do I stand to make any profit, nor gain any future research funding from the publication of this article. I have no books or lectures about day care.