

A Fishy Scandal- what happened?

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*"The widespread occurrence and accumulation of plastic waste in the environment have become a growing global concern over the past decade. Although some marine organisms have been shown to ingest plastic, few studies have investigated the ecological effects of plastic waste on animals. Here we show that exposure to environmentally relevant concentrations of microplastic polystyrene particles (90 micrometers) inhibits hatching, decreases growth rates, and alters feeding preferences and innate behaviors of European perch (*Perca fluviatilis*) larvae..."*

The background

"Lönnstedt and Eklöv (supervisor) both hold positions at the Department of Ecology and Genetics at Uppsala University. The suspicions concerned the article "Environmentally relevant concentrations of microplastic particles influence larval fish ecology", published in June 2016 in the journal *Science*.

The research project concerned involves a study of how fish larvae and fish fry are affected by microplastic particles..."

Published in *Science* –
(researchers would
dream to publish here)



Extracted from Article of Complaint of Misconduct in Research (emphasis mine)
http://www.uu.se/digitalAssets/640/c_640434-l_1-k_uvf-2016-1074-decision.pdf

A Fishy Scandal- what happened?

For fame and fortune

“The findings coincided with increasing concern about microplastics in the ocean and declining perch numbers in the Baltic. They attracted global headlines and helped to earn Dr Lönnstedt a \$330,000 (£236,000) research grant from a Swedish funding agency. Dr Lönnstedt’s work there has contributed to 18 papers in which she was lead author or co-author, on subjects including fish’s predatory behaviour, ocean acidification and habitat degradation. Half of the articles were also co-authored by Professor Chivers, Dr Ferrari or both.”

So what happened?

“On 20 June 2016, Uppsala University received a complaint of misconduct in research against Oona Lönnstedt and Peter Eklöv. Oona Lönnstedt was last year (2017) found guilty of deliberately fabricating the data underpinning a 2016 paper in the journal Science.”

A Fishy Scandal- the verdict?

The Grounds by Vice-Chancellor Eva Akesson and Board. Chief Legal Officer Per Abrahamsson

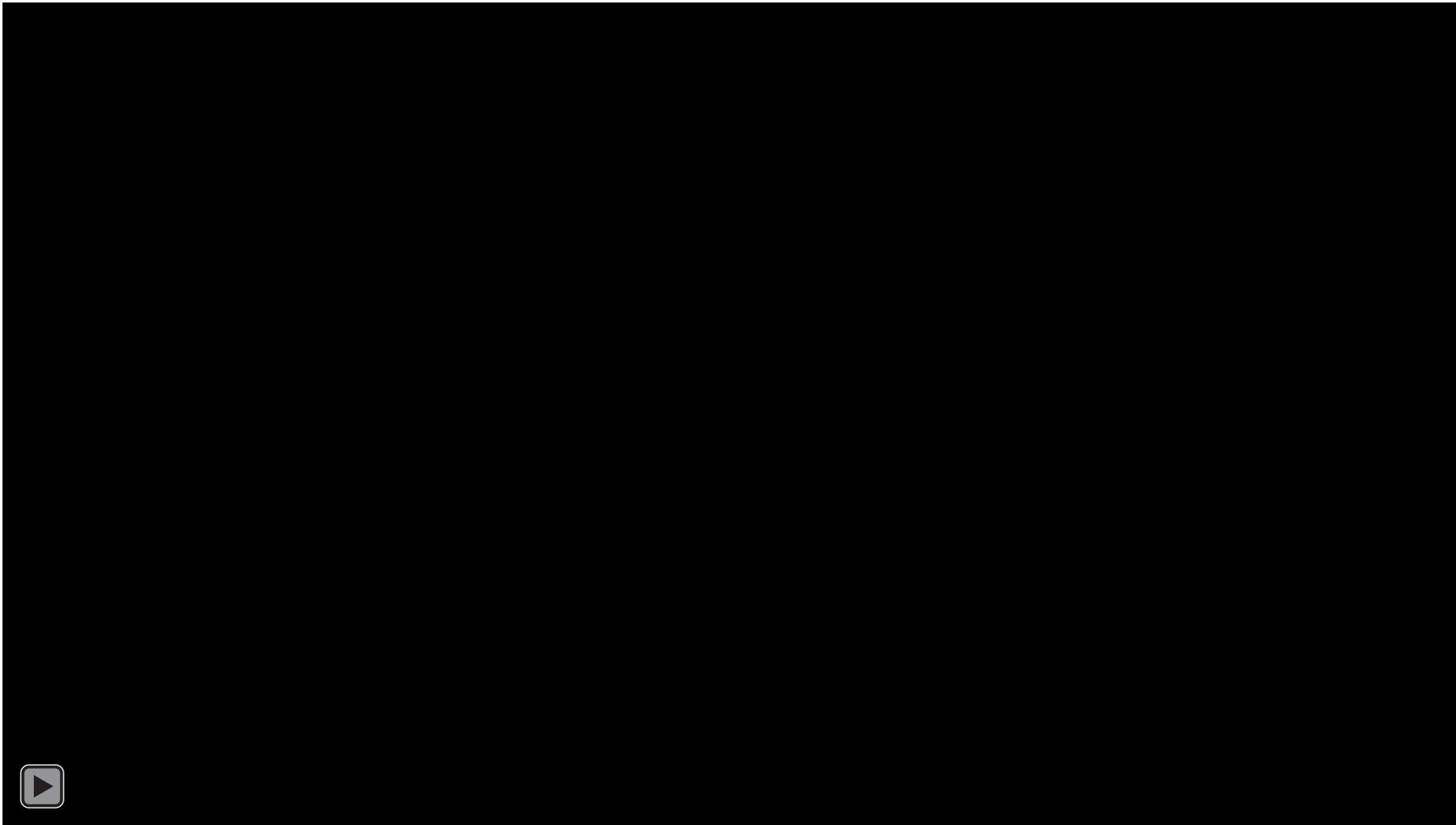
Oona Lönnstedt and Peter Eklöv are guilty of misconduct in research, **Eklöv** in that he has violated the regulations on ethical approval for animal experimentation, and **Lönnstedt** in that she has (1) violated the regulations on ethical approval for animal experimentation and because the (2) experiments were not conducted as described in the article in the scholarly journal and are therefore fabricated.

The misconduct in research was intentional. The investigation also indicates that the experiments were not conducted during the period and to the extent stated in the research article. This means that Lönnstedt has fabricated the results. **Lönnstedt** was aware of this when the article was published and the misconduct must therefore be considered to have been committed intentionally on her part. As co-author, senior researcher and supervisor, **Eklöv** had a responsibility to check that the research was carried out as described in the research article. He failed to do this and can therefore not escape criticism. However, his failure in this respect cannot be considered to entail a finding of responsibility for intentional misconduct in research..”.

Extracted from Article of Complaint of Misconduct in Research (emphasis mine)
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Story 2. A Modern Tail - A Fishy Scandal

Published 8 Dec 2017



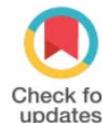
Yet Another Fishy Scandal...early this year 2018



BIOLOGY LETTERS

rsbl.royalsocietypublishing.org

Expression of concern



Cite this article: The Biology Letters Editorial Team. 2018 Expression of concern: Lionfish predators use flared fin displays to initiate cooperative hunting. *Biol. Lett.* **14**: 20180032. <http://dx.doi.org/10.1098/rsbl.2018.0032>

Animal behaviour

Expression of concern: Lionfish predators use flared fin displays to initiate cooperative hunting

The Biology Letters Editorial Team

Biol. Lett. **10**, 20140281 (Published 25 June 2014) (doi:10.1098/rsbl.2014.0281)

Subsequent to the publication of 'Lionfish predators use flared fin displays to initiate cooperative hunting' *Biol. Lett.* **10**, 20140281 (published 25 June 2014 (doi:10.1098/rsbl.2014.0281)), it has been brought to the attention of the Editorial team that there are concerns regarding the validity of the data used in the study.

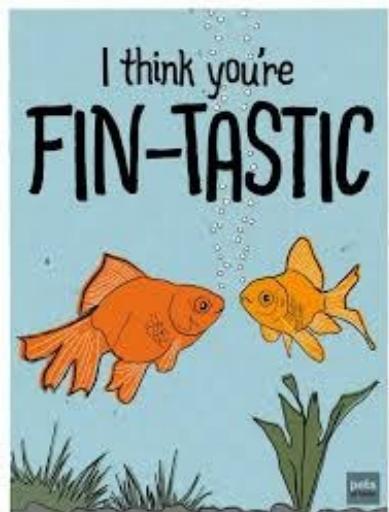
We are therefore issuing an expression of concern and will notify readers as to the results of our investigation as soon as possible.

Prof. Richard Battarbee FRS
Editor-in-Chief, Biology Letters

Surayya Johar
Publishing Editor, Biology Letters



Published 14 February 2018. Valentine's Day



Lecture 4: Academic Research Ethics

*Compared to Product Research? Market
Research ? Industrial Research? Scientific
Research? What's the difference?*

The difference: Other than funding structure, end goal of research, it is paper publications, ...but blurring

What is academic research?

"If we knew what it was we were doing, it would not be called research, would it?"

— Albert Einstein

Definition: A systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions.

Simply put: One key aim of research is to produce new knowledge. It is not simply compiling information from the Internet and tell people what is already known, without adding any new insights, facts or contributions.

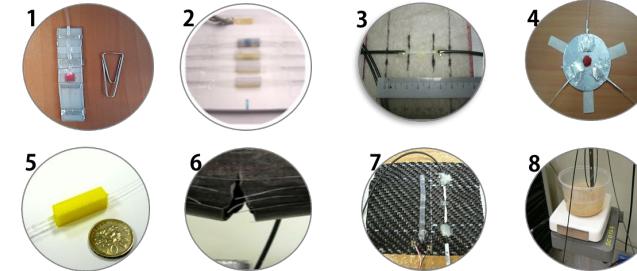
Why do people engage in research?: Other than our need to develop as a civilisation, increase knowledge base, master *technology* for the benefits of mankind (*all the good stuff*), the outcome of research can imply rise and fall of civilizations (or nation and companies), economic gains, strategic military advantage, *translate to* superior products/services (the pragmatics of life) etc.

Typical process academic research or project

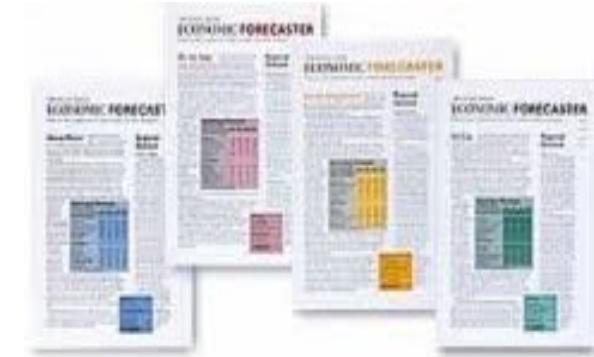


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Worthy Idea



Investigation

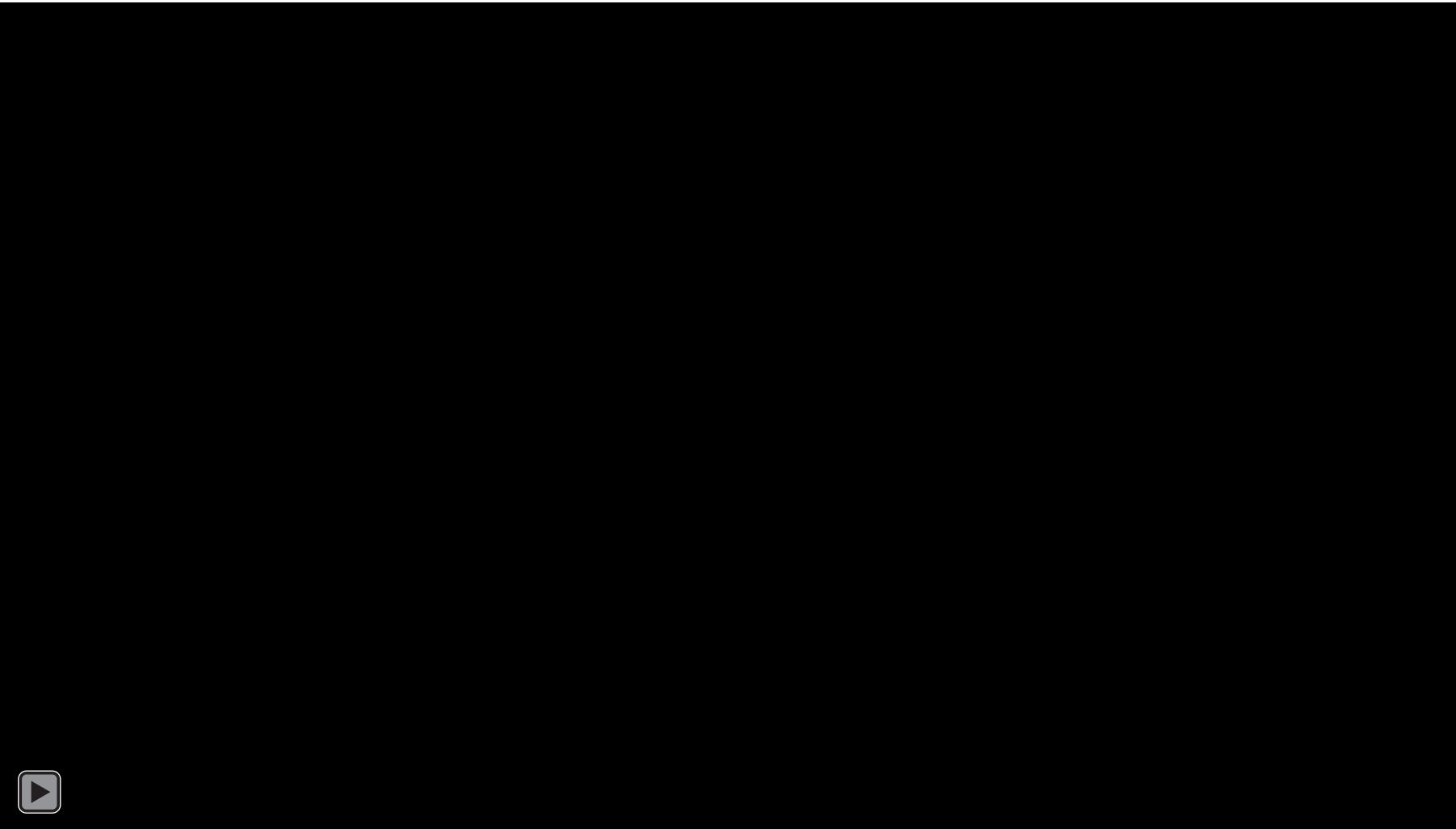


Publication

You start with this

The Internet as a source of ideas, useful to trigger new ideas, to borrow and combine others ideas, but sometimes, people just steal the ideas (claim as yours), no crediting of base intellectual property. Where do ideas come from anyway?

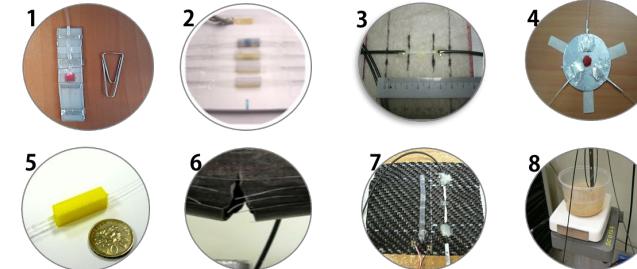
WHERE GOOD IDEAS COME FROM by Steven Johnson



Typical process academic research or project


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Worthy Idea



Investigation



Publication

You start with this

The Internet as a source of ideas, useful to trigger new ideas, to borrow and combine others ideas, but sometimes, people just steal the ideas (claim as yours), no crediting of base intellectual property. Where do ideas come from anyway?

You test out your idea

Plan out fair experiments which could be repeated and validated by others to confirm veracity of scientific method used. Investigation should be systematic and abide by standards or codes, where available. How to ensure impartial, unbiased tests?