



Taylor & Francis Group
an informa business

AI at Taylor & Francis: Benefits and Challenges

Dr. Nick Wise

Research Integrity Manager, Taylor & Francis

Who am I?

APS NEWS | PEOPLE AND HISTORY

Nick Wise, Scientific Sleuth and Fluid Dynamics Researcher

Meet a sleuth whose work has resulted in more than 850 retractions

Nick Wise had always been “slightly interested” in research integrity and fraud, just from working in science.

Then, last July, from following image sleuth [Elisabeth Bik](#) on Twitter, he learned about the work of Guillaume Cabanac, Cyril Labbé, and Alexander Magazinov identifying “tor-



Nick Wise

When a sleuth gets hired by a publisher: A Q&A with Nick Wise

Nick Wise had a prolific start to his sleuthing journey. In [July 2021](#), the fluid dynamics researcher started looking for tortured phrases in published papers, and has since had a hand in [at least 1,000 retractions](#). He also helped identify unique phrases for the Tortured Phrases Detector, a



What do we mean by AI?

- AI can mean many things
- Neural networks, machine learning, generative AI
- Recent concern about AI has focussed on generative AI
- ChatGPT, Claude, Grok etc...

How does Taylor & Francis use AI?

- We use Paperpal Preflight, Turnitin and ImageTwin
- Using automated checks and AI to flag problems in submissions
- Plagiarism, ethical approval, authorship etc..
- The AI must never make a decision
- The AI flags, a human evaluates and decides

ImageTwin

📄 GENERATE REPORT

1 / 1 fig2.jpg
5/5 🖼️ ^

Summary (showing 5 of 39)

33% Conf. Low Fair High

29 Analyzed Images SHOW

0 Empty pages SHOW

5 Dupl. within pages

0 Dupl. across pages

34 Dupl. publications

0 Splicing

Publications

A

γ-T3 (μmol/L)	0	5	10	25
cFLIP	+	+	+	+
Bcl-xL	+	+	+	+
Survivin	+	+	+	+
c-IAP1	+	+	+	+
c-IAP2	+	+	+	+
XIAP	+	+	+	+
Bcl-2	+	+	+	+
β-Actin	+	+	+	+

C

Control scRNA	-	+	-
c-IAP2 siRNA	-	-	+
c-IAP2	+	+	+
β-Actin	+	+	+

Control scRNA	-	+	-
Bcl-xL siRNA	-	-	+
Bcl-xL	+	+	+
β-Actin	+	+	+

Dupl. within pages

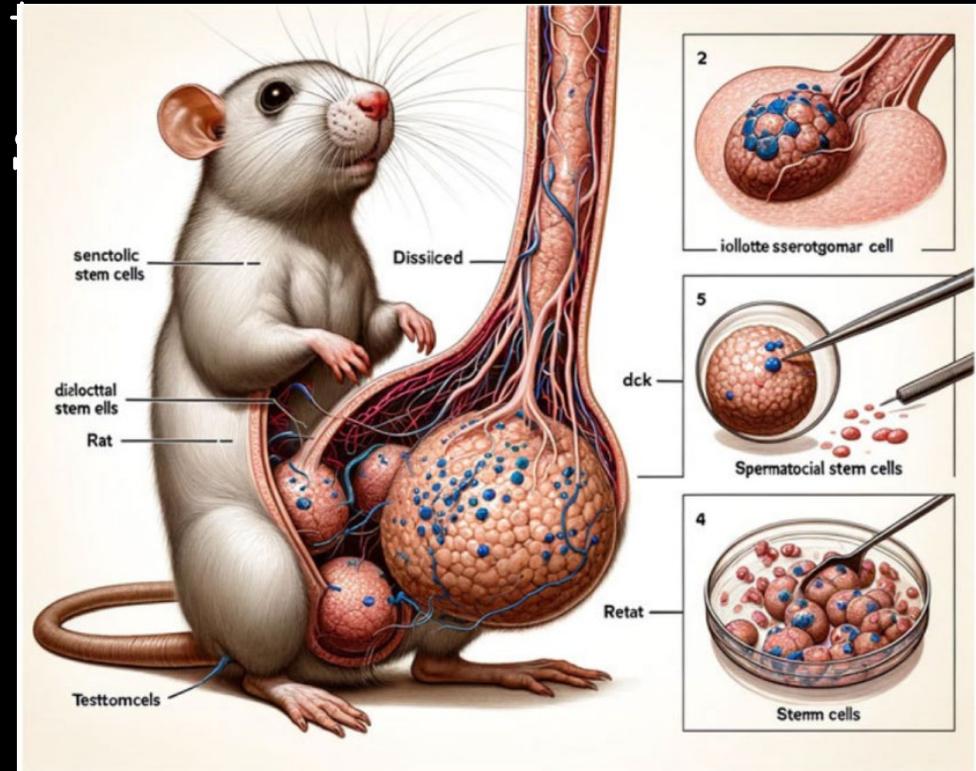
- 98% 🗨️ 👁️
- 98% 🗨️ 👁️
- 99% 🗨️ 👁️
- 98% 🗨️ 👁️
- 99% 🗨️ 👁️

B

	Control	γ-T3	TRAIL	TRAIL + γ-T3
Control	3%	2%	6%	49%
scRNA	2%	3%	7%	48%
Bcl-xL siRNA	2%	3%	9%	56%
c-IAP2 siRNA	2%	6%	8%	51%

Problems of AI

- Generative AI used sensibly is not detectable in text
- AI Images have a



Generative AI and trust

- Generative AI has destroyed trust between editors, authors and reviewers
- A recent peer review:
"This manuscript has large chunks generated by ChatGPT or some other AI assistant. As an example, the "authors" claim that one of the dimensions in the technology readiness index is Parasuraman (the author behind this index). Such errors are extremely unlikely to emerge from human error. Thus, the manuscript should be rejected."

Conclusions

- AI is useful to publishers
- It also creates big challenges
- There is no way to detect AI generated text
- AI has destroyed trust
- AI must never make a decision