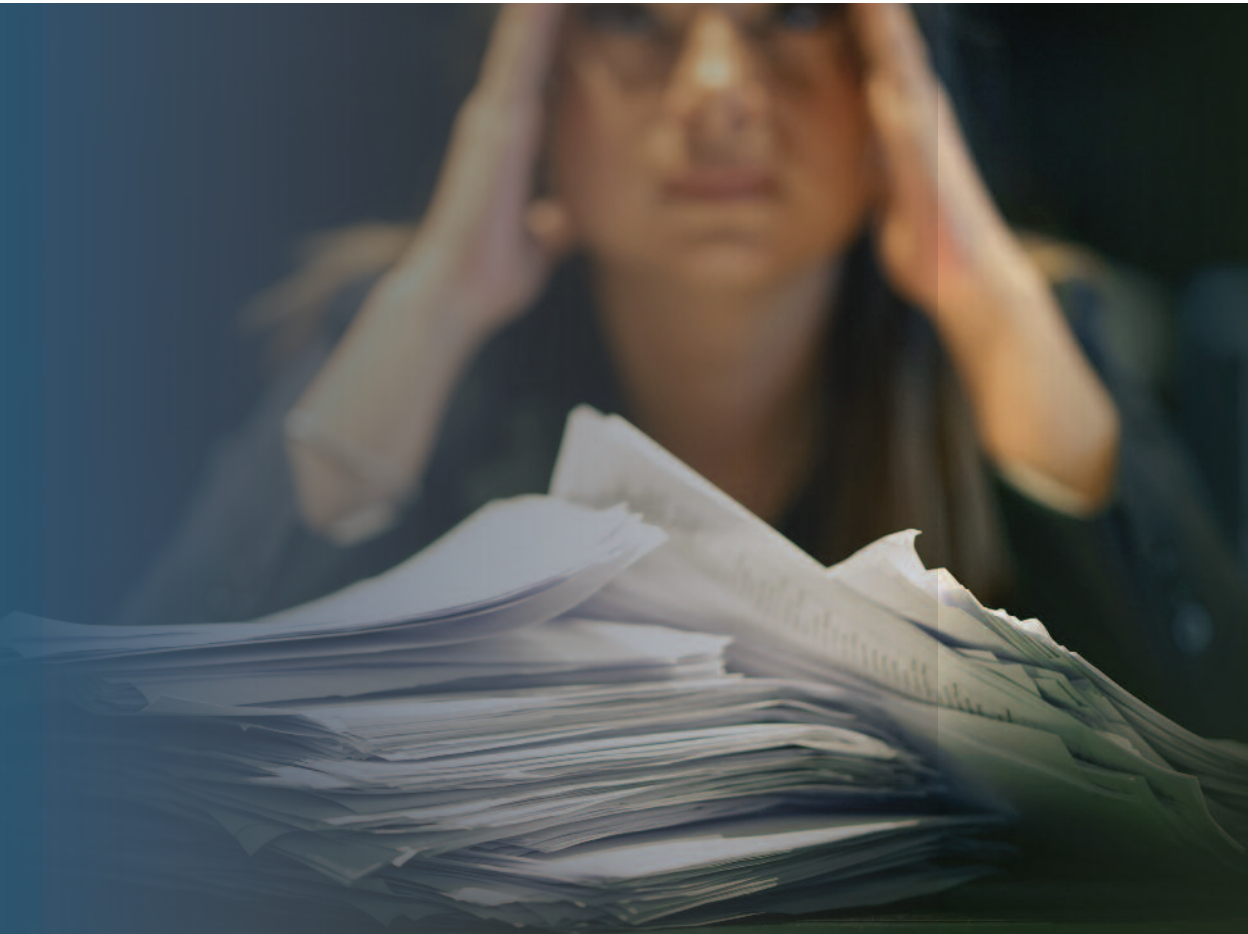


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mythbusters

you can't trust the Bible and be an academic

Zack Millar considers the Bible and research



Have you ever gone to a seminar on how to read a paper? If your medical school is anything like mine, these seminars are held all the time. You start with a system: read the abstract, read the conclusion then the introduction, look at the figures. You learn the pitfalls of non-blinded trials and the limitations of retrospective cohort studies. You copy it all down diligently and

commit it to memory. Maybe you even buy a copy of Greenhalgh's *How to Read a Paper*¹ and read it cover-to-cover.

But it can be a struggle to be taken seriously as an academic and a Christian. Science and faith have long had a strained relationship. How can we reconcile the two?



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start by being a good academic

I would hope that any decent scientist would share a lot of the same concerns as a Christian. Research should be ethical, should accurately report the truth (however unsatisfying the outcome) and be transparent in its method. Whilst as Christians we should not be afraid to be countercultural – when necessary, we need to get the basics first. Get familiar with scientific method, maybe get involved with research yourself... and yes, learn how to read a paper! There is Greenhalgh's book but there are also countless² web articles on the subject.

does this research contradict the Bible?

Regardless of your beliefs on any specific issue, there will always be times when the Bible and science seem to be in conflict. How should we resolve these discrepancies? There are essentially three approaches. (They are not limited to scientific disputes – they are equally useful in historical and moral debates.)

Approach one is to hold scientific fact as absolute and make the Bible fit around that. We use words like 'context', 'symbolic' and 'not literal', so for any dispute, it is our understanding and interpretation of Scripture that is at fault, not our understanding of science.

Approach two is the exact opposite of approach one. We declare what we understand to be the literal words of the Bible to be unequivocal and find ourselves suppressing righteous indignation when anybody dares to question our theology. The world has shifted in the secular direction and our role must be one of resistance.

There is a middle ground, of course.

Approach three is that we should devote no less energy to our understanding of the Bible as of the world.³ There is undoubtedly a place for context, symbolic writing and non-literality; a proper understanding of the Bible requires acknowledging all three approaches. But like medical treatments, we must only apply them where indicated and resist the temptation to apply them because we *want to*, rather than because we *should*.

So, when we read a new piece of research, always hold it up against the Bible. Do the findings contradict anything we hold to be true? If so, be especially careful before accepting the findings as fact.

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does this research break God's laws?

As an undergraduate, I once was involved in a lab experiment where we transfected HEK 293 cells. This is a cell line dating back to 1973, when Human Embryonic Kidney cells were obtained from a foetus legally aborted under Dutch law. I did not personally create or destroy any embryos, nor was I responsible for that original abortion in 1973. But should Christians use these types of cell lines in our research, even if we are now extremely far removed from the original act? That question has been turning over in my mind ever since and its answer is probably unique to all of us.

Every scientist would agree that the only good type of study is an ethical study. Fundamentally, research ethics exist to protect the rights of the

participants. They are protected from harm, exploitation and unnecessary risk. The Christian difference then, lies in the ethical principles we hold true.

When I say the rights of the *participants*, I could broaden that out and say the rights of the *person*. The ploy is to attempt to redefine what constitutes personhood. Is an unborn baby a person? How about a 24-week foetus? How about a blastocyst? The creation of embryonic stem cell lines is currently permitted in UK research, but there are many Christians who wish that were not the case.

'This study was approved by the Sacred Heart Research Ethics Committee.' That simple statement would satisfy most editorial boards and readers. We as Christians should dive deeper, beyond the Declaration of Helsinki,⁴ and ask whether the research conforms not just to our laws, but to God's laws too.

who will benefit from this research?

Have you heard of the massive transfusion protocol? Historically, when patients lost a lot of blood, we used to pump them full of 0.9% saline. In a short while, the fluid in their vessels became salty water and a lot of people died. Now, we know to give a 1:1:1 ratio of packed red cells, fresh frozen plasma and pooled platelets. It has been shown to reduce mortality in trauma patients. Great research; ten out of ten; *tick*.

But, a single unit of blood costs around £165,⁵ and we often give tens of units for the worst cases. In low and middle-income countries, the expenditure alone is simply not feasible, regardless of the availability of blood products. Massive transfusion protocols may be great in first-world trauma centres, but they are largely not applicable to the rest of the world.

Christians have a calling to provide care to the entire world, not just those with money who can access it. As exciting as it is to push the boundaries of medical research, we have to consider who the research will benefit. Does the latest frighteningly

questions for reflection

- Where do you find science coming into conflict with your faith? What would it look like to rationalise those conflicts appropriately?
- How could you use ethical dilemmas as springboards for evangelism? Perhaps in your own research or discussions of other work?
- If you could design a piece of research to benefit as many people as possible, what would it be and why?

expensive monoclonal cancer therapy help the family struggling in sub-Saharan Africa? Probably not. Does that mean we should only do research that will benefit everyone? Again, probably not, but when it comes to funding, it should definitely be a consideration. As you read a paper, ask whether all of God's people have been helped by the work in front of you.

conclusion

This article touches upon issues about which tomes have been written – ethics, research economics and conflicts between the Bible and science. I cannot begin to address them fully here. But in short, every healthcare professional is also an academic. I do hope that we will all, therefore, think differently and scrutinise research a little deeper as Christians. ■

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