

Does Science Pose a Threat to Today's Catholicism?



Revd Dr Gareth Leyshon
16 March 2026



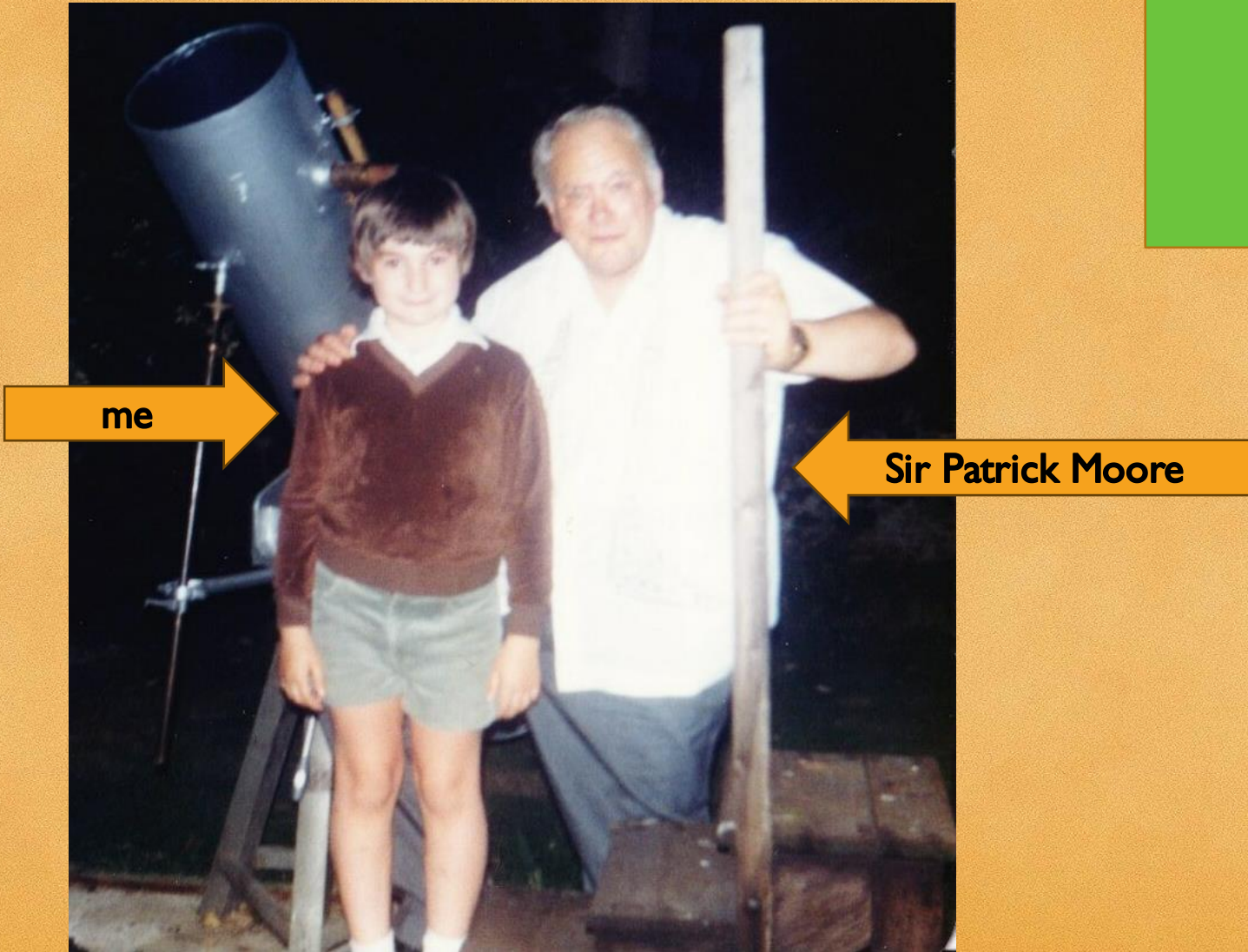
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Sion
Catholic Community
for Evangelism



Age 7

Science!



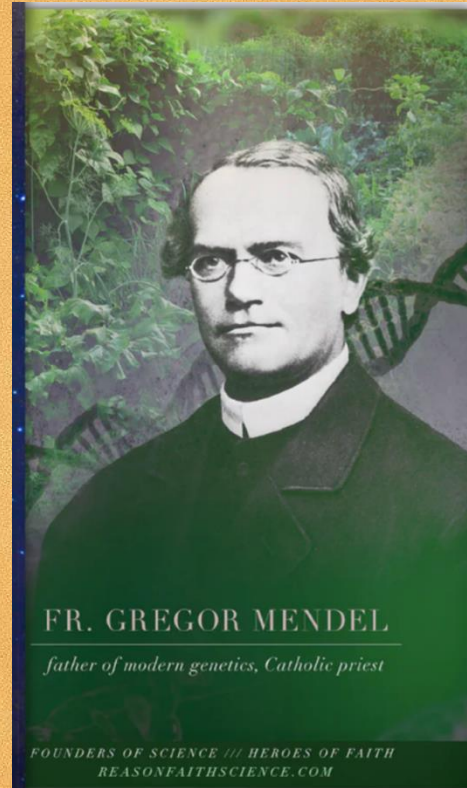
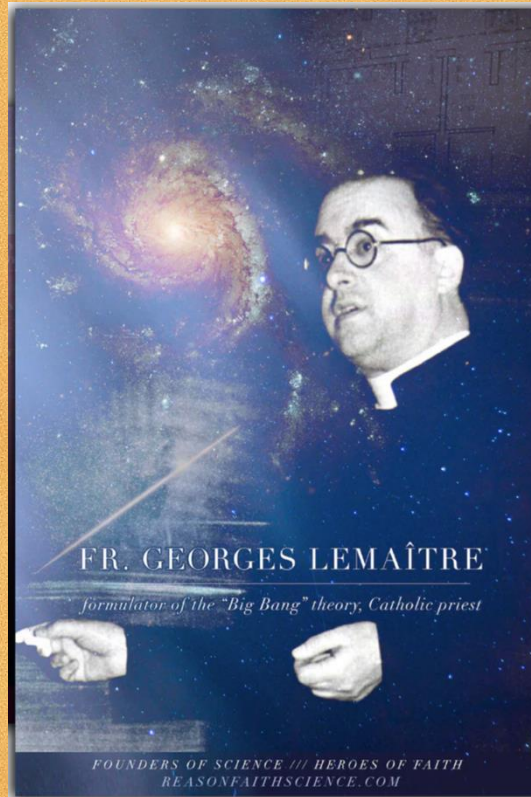
Age 11

Jesus!



There are ways of reading Genesis which are not literal.

The Big Bang & Evolution are not threats



PONTIFICAL BIBLICAL COMMISSION 1994
The Interpretation of the Bible in the Church

Pope acknowledges theory of evolution

■ Ignoring conflicts with biblical texts, John Paul calls view 'more than hypothesis'

BY JOHN TAGLIABUE
The New York Times

ROME — Nearly a century and a half after Darwin's "Origin of Species," Pope John Paul II has put the teaching authority of the Roman Catholic Church firmly behind the view that the human body may not have been the immediate creation of God but is the product of a gradual process of evolution.

Study says the origin of animal life dates back further than thought. A5

tion, but its strongest statement of concern came in the encyclical letter "Humani Generis," which was



Pope John Paul II

issued by Pope Pius XII in 1950. It cautioned that while evolution as such might not be objectionable, it played into the hands of materialists and atheists,



Evolution is "more than an hypothesis."

22 Oct 1996

Message to the Pontifical Academy of Science

Non-Overlapping Magisteria

Catholic Church claims no special authority to teach on matters of history or science (G&S 59)

BUT...

We affirm the Gospels tell the 'honest truth' of what Jesus said and did, including miracles

Every canonization requires a miracle

THREAT I: Certain miracles disproved?

Lourdes #64 Serge Perrin

- Remarkable recovery from a stroke?
- Psychosomatic disease?
- Characteristic remission of multiple sclerosis?

Lourdes #65 Delizia Cirolli

- Cure of cancer in the knee?
- Or a TB-linked bone disease?



Pio XII
HUMANI GENERIS



AMICIZIA CRISTIANA

1950 Pius XII

We all descend,
literally and biologically,
from one original sinner.

Couple = genetic bottleneck

We all descend from the first
common ancestor of Trait X.

Either way, there's a moral problem...

One original couple and no other hominids?

➤ their children would necessarily commit incest

One original ensouled sinner among hominids?

➤ the sinner and early generations would necessarily commit bestiality



THREAT 2: Doctrine undermined by science?

Humani Generis as a 'near miss'

Problem areas:

Christian anthropology – the nature of '(hu)man'

Dei Filius 2 – 'God can be known with certitude by the natural light of human reason from created things'

Aristotle's Four Causes

Formal (the laws of nature) QUANTUM!

~~Material (the things which obey those laws)~~ NOTHING

~~Efficient (the kick-start of the process)~~ QUANTUM!

Final (the intended purpose) NOT SCIENCE

The Universe bootstraps itself into existence in the absence of matter or a 'first motion' because it's mathematically possible?

Could the Universe be its own 'first cause'?

It's Complicated...

THREAT 2: "First cause" logic not trivial.

Given the reality of Quantum Mechanics,
we no longer have the luxury of being able to say
"there's an uncaused cause, an unmoved mover"
as a *simple* response.

To me, God as Creator is revealed, not obvious.

The purpose of human existence is also revealed.



THREAT 3: Are humans different in *nature*?

Both theology and science have something to say

Species?

Historically rooted in Biblical 'kinds'

Simplistically defined as “can’t interbreed fertile offspring”

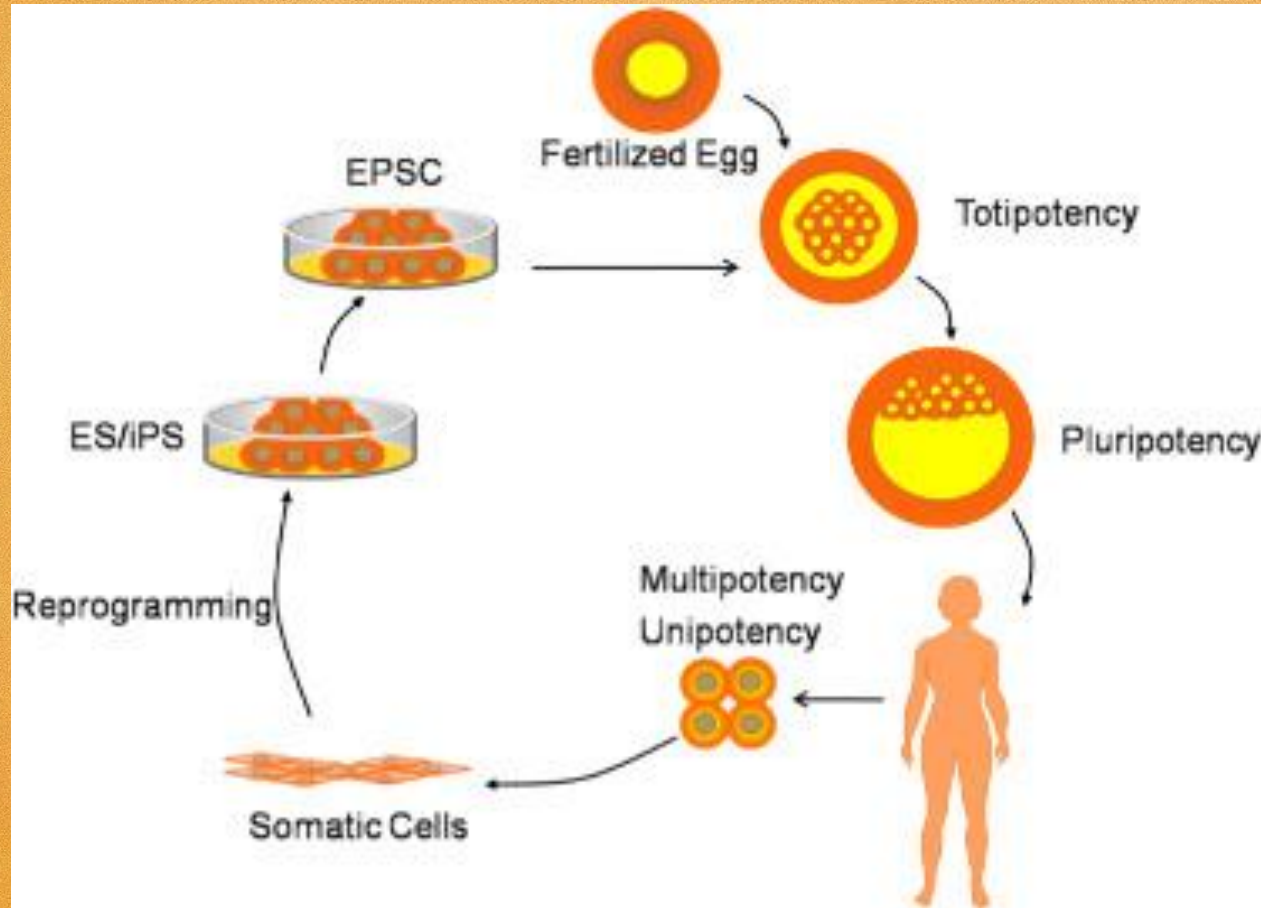
We have some Neanderthal DNA

How does that work for bacteria *etc.*?

What about genetic engineering?

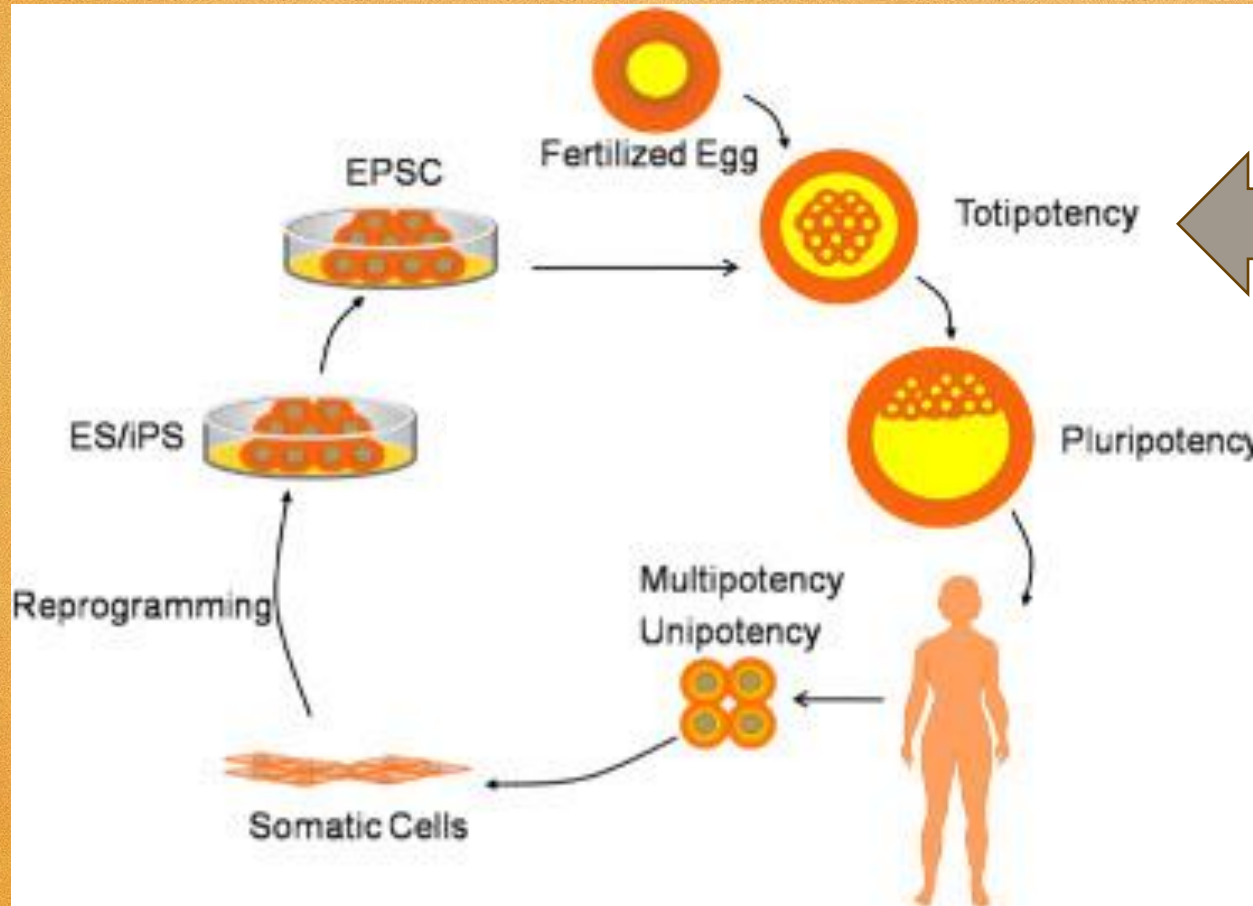
Biological continuum – theological hard boundary

THREAT 3: What is it to be human?



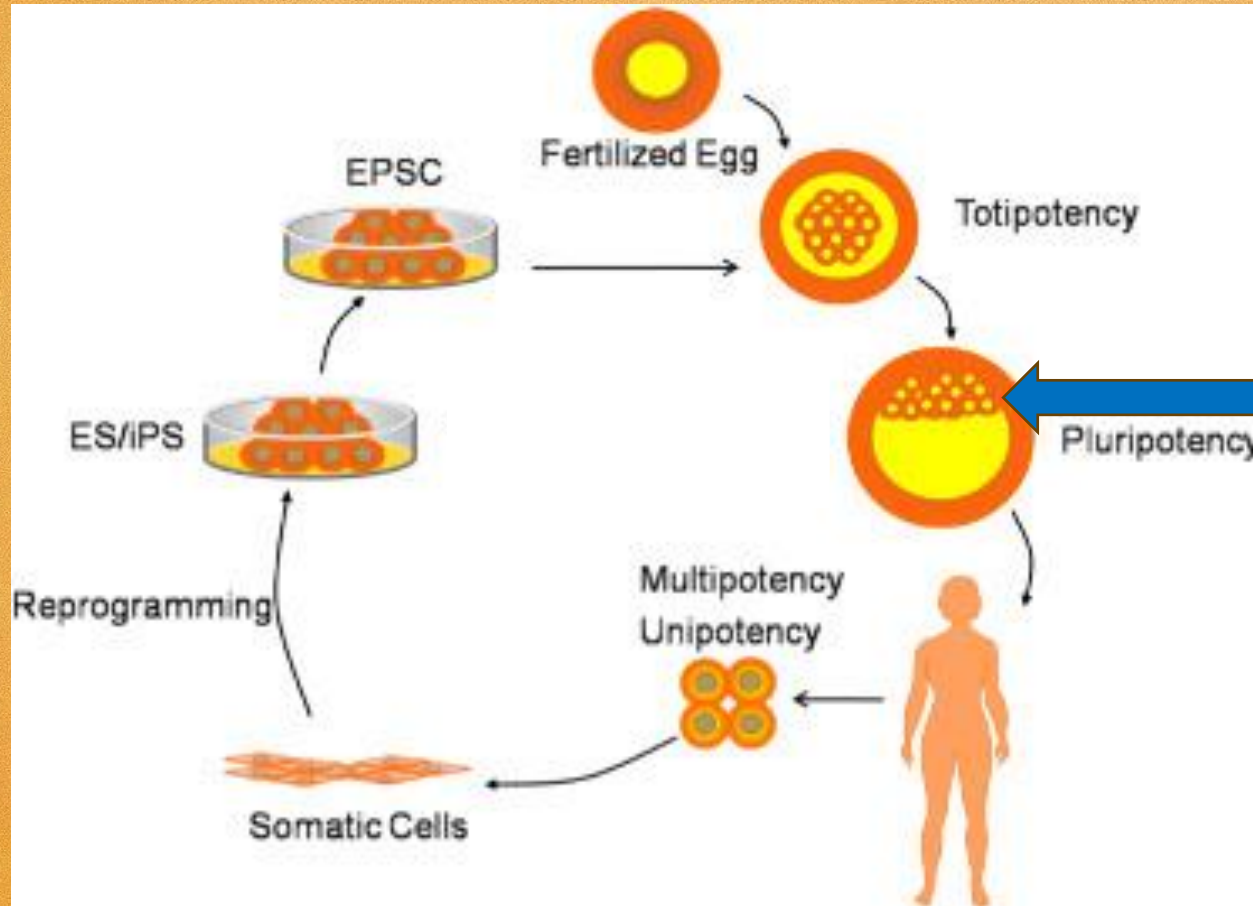
Almost every cell contains the instructions required to create an entire copy of its human body!

THREAT 3: What is it to be (a) human?



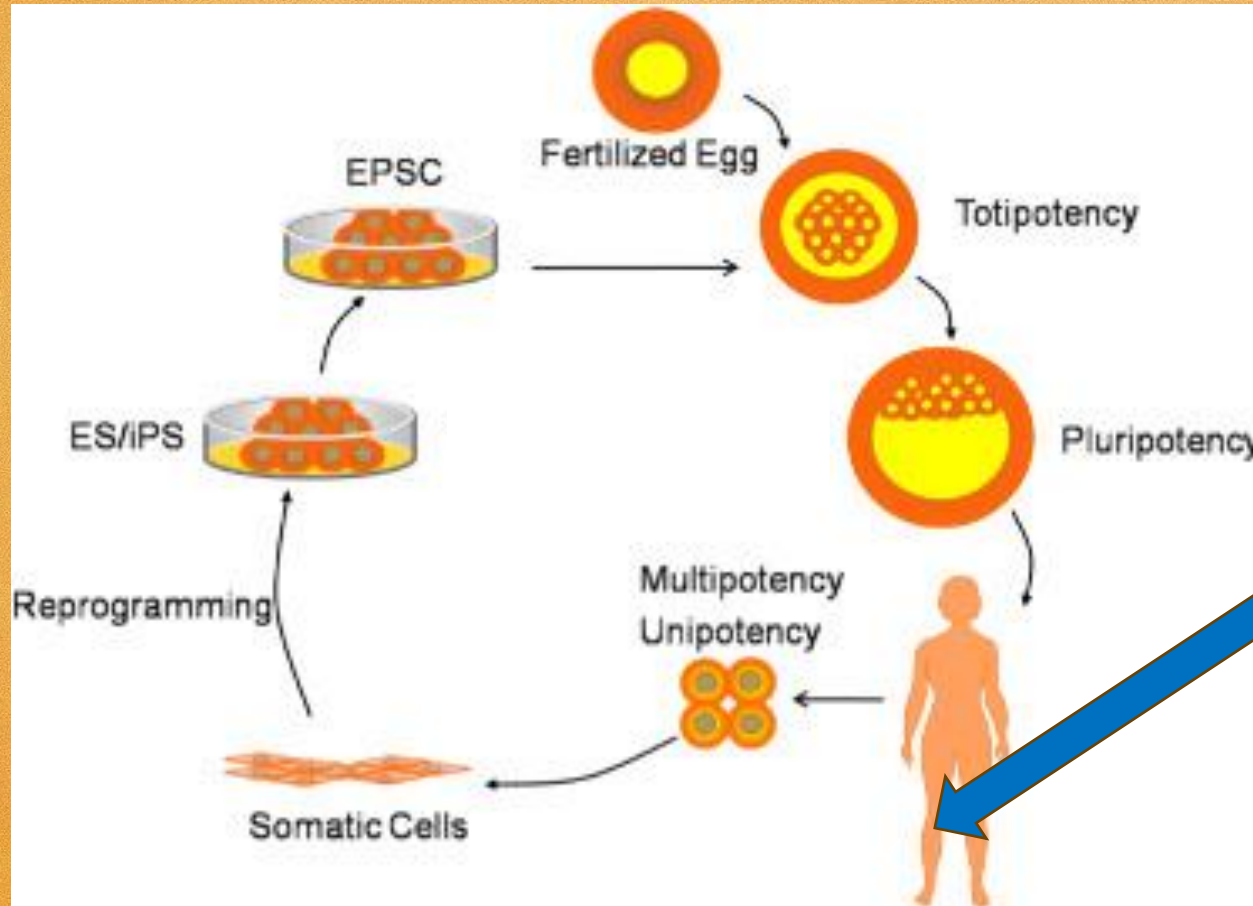
TOTIPOTENT
cells from the first
few divisions can
form any part of
the human body,
placenta or
amniotic sac

THREAT 3: What is it to be (a) human?

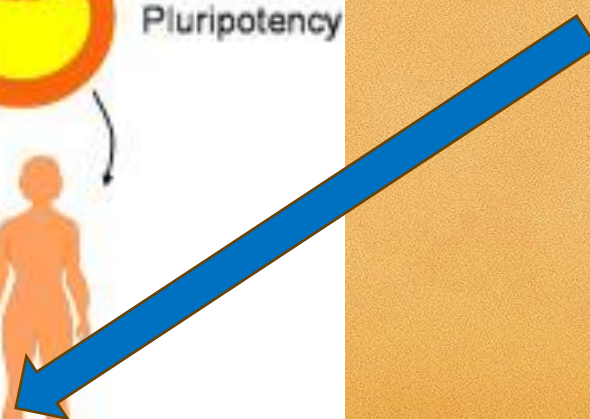


These
PLURIPOTENT
cells can form any
part of the human
body, **BUT NOT**
the placenta or
amniotic sac

THREAT 3: What is it to be (a) human?

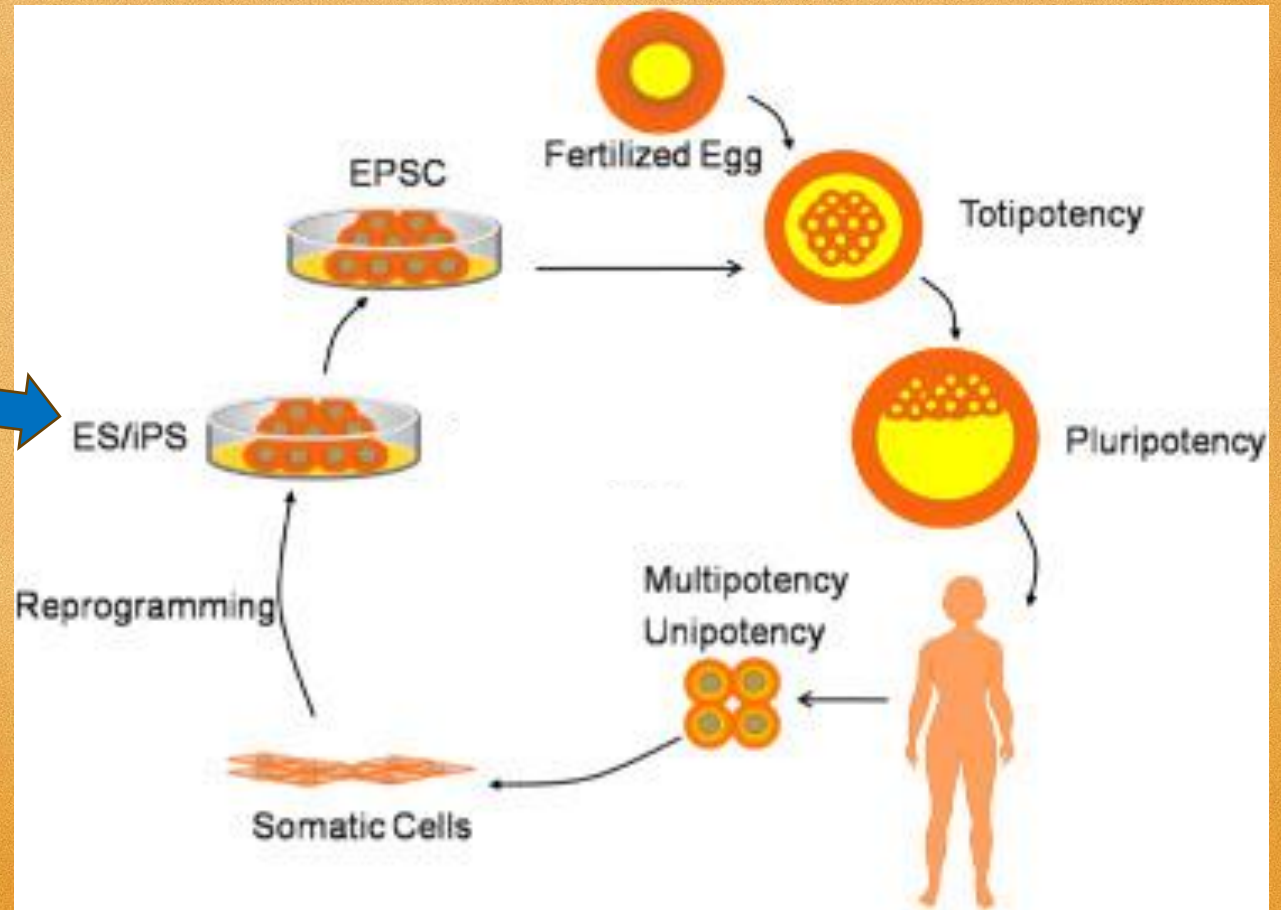


In adult bodies
MULTIPOTENT
(stem) cells can
form bone marrow,
blood cells and
immune cells *etc.*



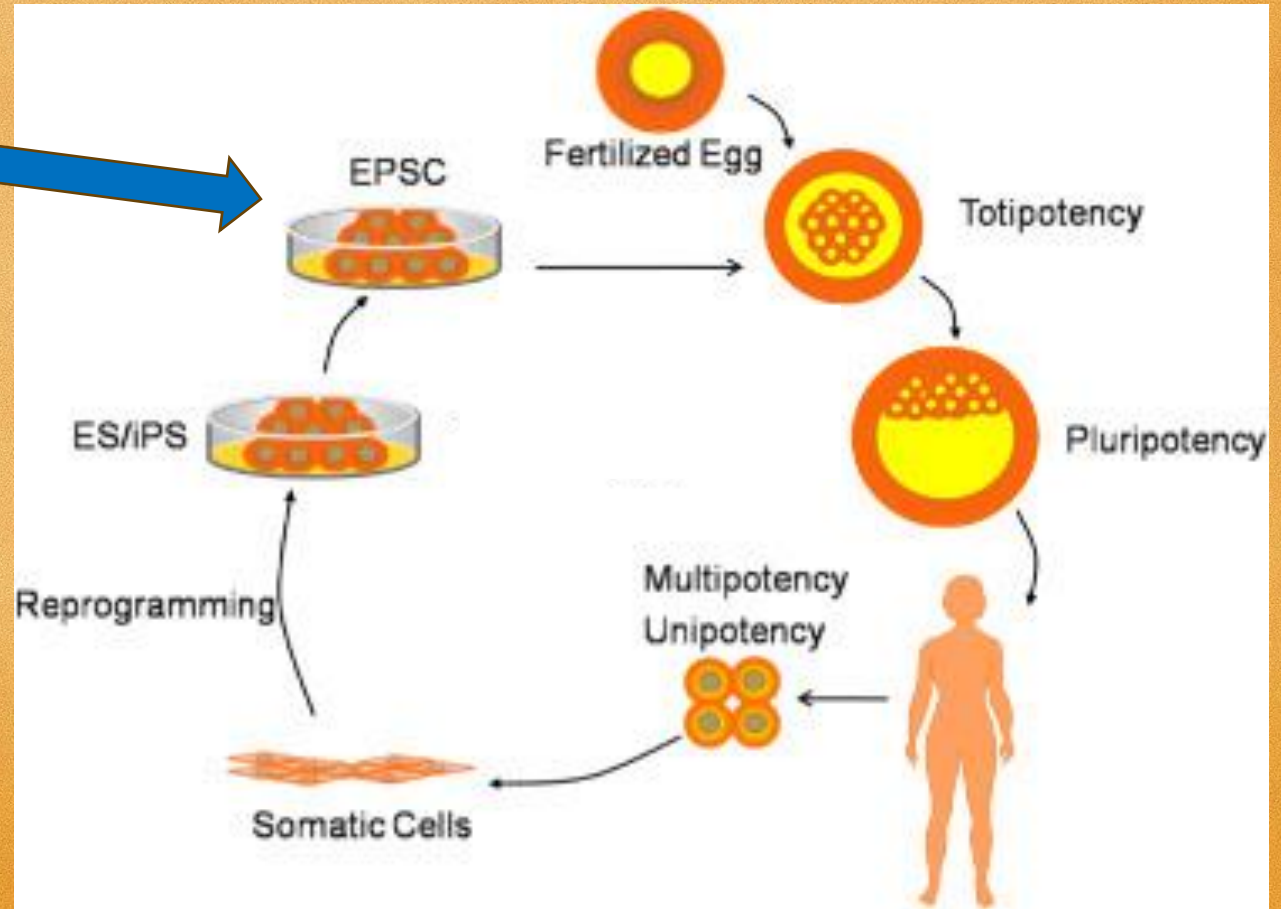
THREAT 3: What is it to be (a) human?

We are now able to program (induce) human skin cells to revert to a pluripotent state

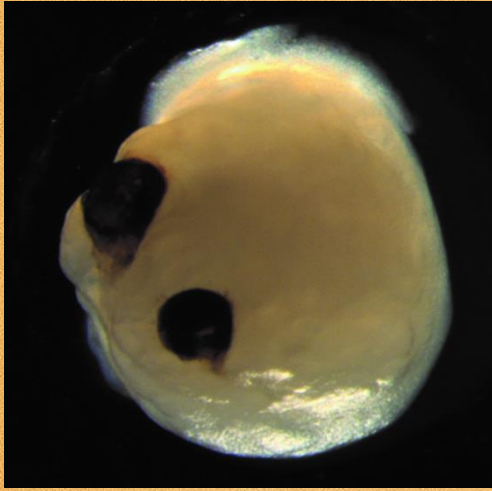


THREAT 3: What is it to be (a) human?

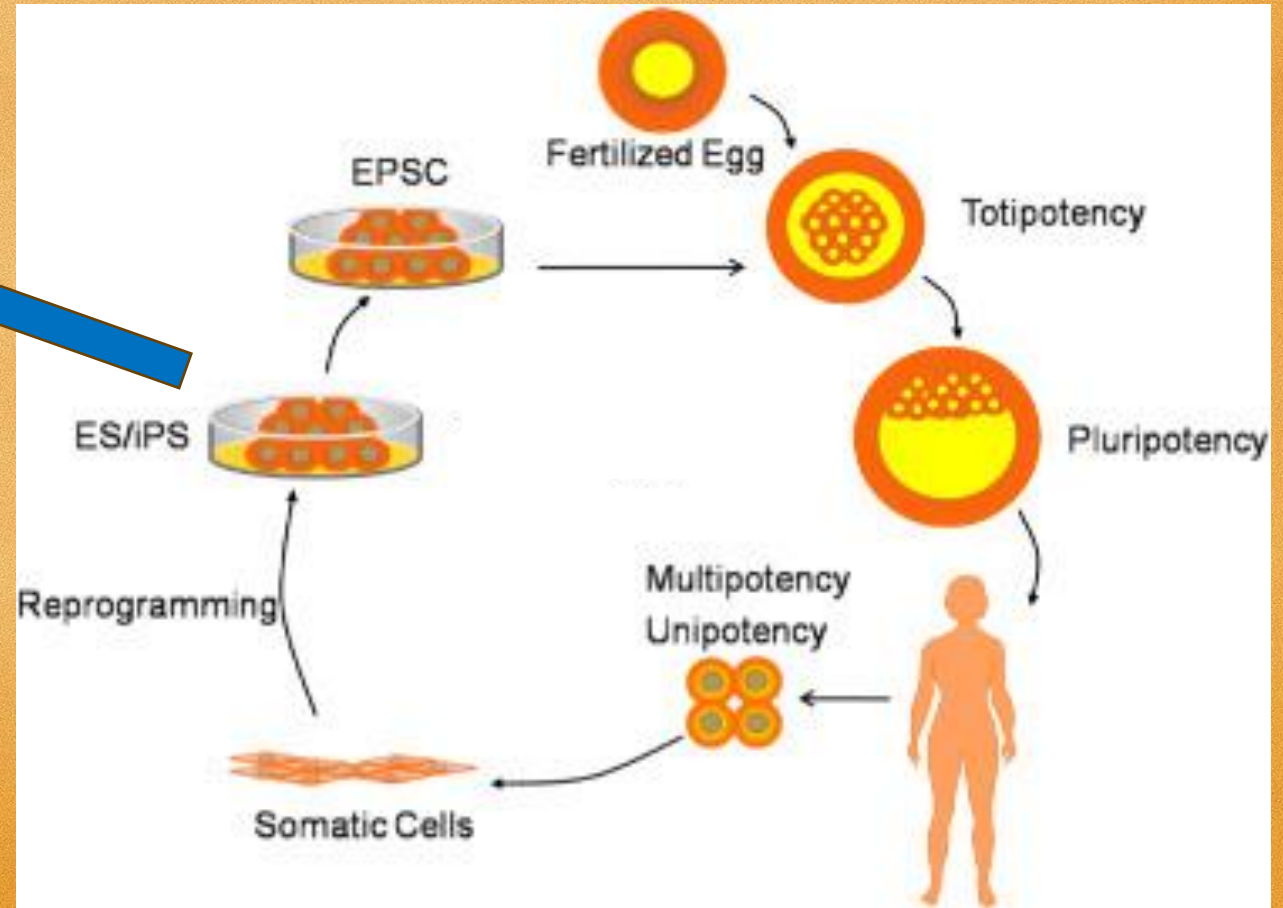
We are nearly able to reproduce totipotent states... have we produced a new human life?



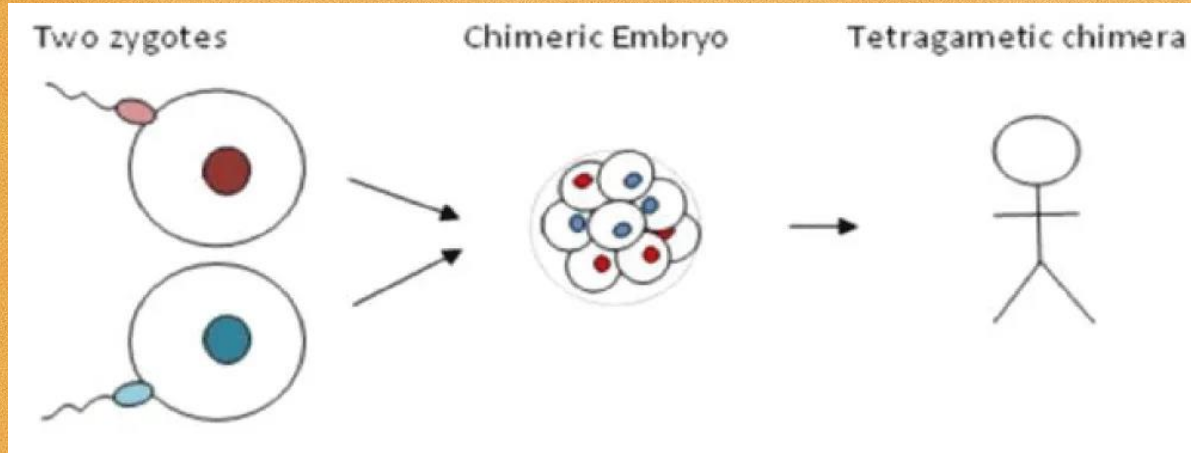
THREAT 3: What is it to be (a) human?



From pluripotent cells we can produce human brain organoids... this one grew light-sensitive cells by developing optic cups



THREAT 3: What is it to be (a) human?



Two embryos can fuse to become a single human individual.

What about the soul?



THREAT 3: What is it to be human?

Human chimeras exist

We can regress human skin cells almost to totipotency

We can create human 'brain organoids' in the lab

We can make animals with 'human-tissue' organs

We can transfer genes from other animals into humans

Is a genetically damaged human embryo still human?

Relevant when we theologise about 'humans'

May need to focus on 'human dignity' not soul

THREAT 4: Can we be judged as free minds?

“Jesus... will judge the living and the dead.”

Physics has no room for “free will”

- Classical processes are 100% deterministic
- Quantum processes are inherently random

Biology also challenges the idea of consciousness “deciding”

- Split brain patient case studies
- Brain imaging showing we “decide before we decide”

THREAT 5: Confusing values with outcomes

Consider the claim that: “It is better for a child to be raised by a mother and a father.”

Is this testable?

What are our criteria for ‘better’?

Can this be done without pre-assuming findings?

And... “It is best to embrace the gender-identity which corresponds to your unambiguous sex at birth...”

Are we ready to scientifically test
the moral choices which we teach?



Are we ready to say our faith may require us
to choose to be disadvantaged?

How does this interact with legal best interests tests?
(child custody, safeguarding,
medical interventions, assisted dying?)

THREAT 6: Technologies which force a “NO”

No gene selection for human embryos

No to dehumanising use of Artificial Intelligence

Are weight loss drugs ‘against natural law’?



RECAP

1: Was that really a miracle?

2: Is it obvious we need a Creator / First Cause?

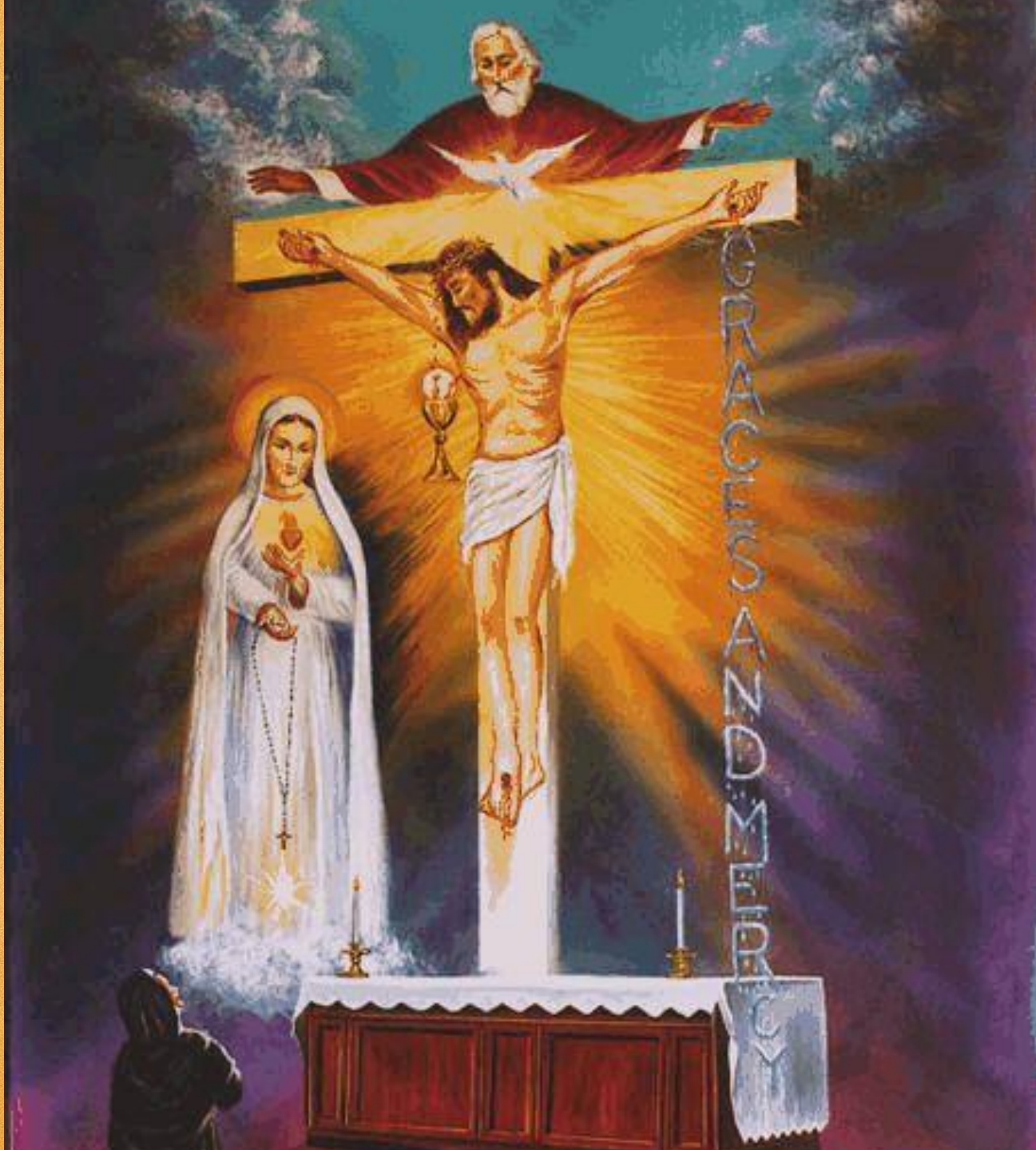
3: Can we defend humans being distinct and special?

4: Is free-will, and thus final judgment, defensible?

5: Does empirical “best” support moral “best”?

6: We love you, but you can't use that to help you.

Science seeks to reconcile tensions too! Don't stop believing!



My faith is
in Jesus.

OPPORTUNITIES...

The virtue of caring for handicapped people

The virtue of investing time in dying relatives

The virtue of using AI to overcome weakness

The virtue of knowing that human life has purpose

The virtue of being desired by God

The virtue of proclaiming that God can work miracles

We **can** affirm the Catholic faith but must avoid pitfalls.

The threat is ignorance. The solution is faith with reason.