

Discussion Question Guide for Stem Cell Research and Cloning 101: A Primer

1. Why don't we need to understand a lot of the biology involved in stem cell research and cloning?
Once we understand the simple biological fact of when a human life begins and how these technologies deal with human life, we can apply God's Word of Life to them.
2. What are the two "foundation stones" upon which we stand as Christians that enable us to connect God's Word to these issues?
Every human being from the very beginning is the work of God's hands in creation. Every human being from the very beginning is the work of God's hands in redemption—a person for whom Jesus died.
3. How does Psalm 139:13-14 relate to the first foundation stone?
The picture here is of God's intimate involvement in the formation of human life.
(For a more in-depth study of this point see the *GOD'S WORD for Life* Bible commentary p.712a.)
4. How does Luke 1:26-45 relate to the second foundation stone?
Jesus' redemptive process began at conception.
(For a more in-depth study of this point see the *GOD'S WORD for Life* Bible commentary p.1184a.)
5. What does Psalm 51:5 have to do with the previous question?
Since we were sinful from conception, Jesus had to take our place from this point and pass through all the stages of human development. Since the Psalm tells us we are sinful from the moment of conception, we are necessarily human from the moment of conception.
(For a more in depth study of this point see the *GOD'S WORD for Life* Bible commentary p.634a.)
6. Where do embryonic stem cells come from?
A 5-6 day embryonic human being, also called a "blastocyst." Review the biology here if necessary. If you have the LFL brochure *Stem Cell Research: Understanding the Basics*, refer to the diagram on the bottom of the first page. The point to reiterate is that this "hallow ball" is a tiny little girl or boy who dies when the "inner cell mass" (stem cells) is removed.
7. Do embryonic stem cells have the potential to cure diseases?
Yes. Remember, these cells have not "decided" what tissues they will become yet and so theoretically they can become any tissue. Therein lies their potential to treat disease. It is true that to date there have been no diseases treated in humans with embryonic stem cells. (You can check if this is still true by going to www.stemcellresearch.org.) However, make it clear that whether or not embryonic stem cells cure disease is not the point. Even if they would someday prove successful, we must oppose embryonic stem cell research because it kills a tiny human being.
8. What are adult stem cells?
These are stem cells that have *matured* and have differentiated or "decided" what tissue they will become. See how many sources of adult stem cells people can remember from the DVD—bone marrow, umbilical cord blood, fat, nasal passages, pulp of baby teeth.
9. What is the real blessing God has given in regard to adult stem cells?
They have been shown to be "pluripotent" that is they too have been shown to become other tissue types. We are already treating a number of diseases in humans using adult stem cells. (Again, you can keep up to date on this at www.stemcellresearch.org.)
10. Can Christians be in favor of adult stem cell research?
Yes. Christians are not opposed to technology or research. These are gifts from God. But research that kills human life, even in an effort to help human life, goes too far.

11. How does cloning fit into the embryonic stem cell research debate?
Cloning is seen as a way of producing the large quantity of embryos needed for this research. The idea is to clone human beings, allow growth to the blastocyst stage, and then destroy the embryo for his or her stem cells.
12. Review the cloning procedure.
It would be good to have the LFL brochure *Cloning: Understanding the Basics* and refer to the diagram in the middle of the second page.
13. What is “somatic cell nuclear transfer”?
Cloning! Make sure everyone understands that SCNT is a process used for cloning. Refer again to the diagram—a Somatic Cell’s Nucleus is Transferred into an empty egg cell. This produces a clone. Although many animals have been cloned, human beings have yet to be cloned.
14. Discuss the Bible passages at the end of the DVD used to show why Christians oppose embryonic stem cell research and cloning.

1 Corinthians 10:23-24 – Just because something *can* be done, or is even beneficial, does not necessarily mean it *should* be done.

Psalm 139:13-14 – God is in charge of the procreation of human life through the biological process He established. Cloning removes procreation from this process and turns it into reproduction and turns human beings into disposable products.

Matthew 19:4-5 – God has also established a *context* for His biological process—marriage between a man and a women. Cloning violates this context.

Exodus 20:13 – Embryonic stem cell research intentionally takes the life of a tiny human being. On the positive side of this commandment, we are to “help and befriend” human embryos as our neighbors.

Exodus 20:2-3 – Looking to embryonic stem cell research and cloning for more help and hope than from God, violates the first commandment. It turns technology, a gift from God, into an idol opposed to God. But the God who gives His commands is a *redeeming* God! His commands tell us how redeemed people are to live. God redeemed us through the death and resurrection of Jesus.

Romans 8:32 – This redeeming God is not going to forsake those He has redeemed. We are too precious to Him. We can trust in Him for help and hope in every and any situation. We do not need to turn to technologies that are contrary to the will of God.