Genetic Information and Manipulation Technologies

As genetic knowledge increases and technologies to manipulate genes become more powerful, our need for wisdom in application intensifies. In regard to human genetics in particular, the conditions that allow for hubris call for an even greater measure of humility.

As Christian healthcare professionals, we affirm that:

- All human beings have been individually created through the providential interest and design of Almighty God. Being created in the image of God, every human being has inestimable worth, regardless of genotype or phenotype (see CMDA statement on the Human Life: Its Moral Worth).
- The diversity of individuals is part of the wonder and strength of God's sovereign design.
- Each human life is a composite of genetic, environmental, historical, social, volitional, and spiritual factors.
- God has endowed humans with minds capable of exploring, but only partially understanding, the magnificence and intricacies of His Creation. Human knowledge and wisdom are limited and may be used for evil or for good.
- God has mandated responsible stewardship of Creation, both of ourselves and of the surrounding world.

Therefore, in regard to genetic technologies in medicine, CMDA believes:

- The presence of a disability, either inherited or acquired, does not detract from a person's intrinsic worth.
- Fallen humanity lacks the wisdom and moral restraint necessary to take control of human genetic destiny.

CMDA supports:

- The use of genetic information in guiding the care of patients.
- Strict confidentiality of an individual's genetic information, as for all personal health information.
- Healthcare professionals informing the patient with a genetic diagnosis of potential familial risk and encouraging the patient to share information about heritability risk with family members.
- Somatic cell manipulation (excluding somatic cell nuclear transfer, i.e., human cloning)
 to replace absent or defective genes, as this is consistent with the goals of medicine and
 may be good stewardship of knowledge. Such manipulation should be performed only
 after extensive study demonstrates the specificity, benefits, and risks of these
 interventions, or as part of an approved clinical trial.
- The scientific exploration of life, including its genetic foundation, as this is proper and consistent with God's mandate and humanity's created nature, but it must be conducted within the constraints of biblical principles in order to conform with God's design for human flourishing.
- Genetic testing of minors (embryos, fetuses, children), provided the result could potientially benefit them prior to majority. Because a minor is unable to give informed consent, presymptomatic testing of a minor should not be performed for disorders that

will not either affect his or her health until after majority or lead to therapeutic intervention before majority.

CMDA opposes:

- The search for and use of genetic information to justify destroying an existing human life, born or unborn, for example, as has occurred with Down syndrome.
- The use of genetic information for positive or negative discriminatory purposes, including sex selection of human embryos, or infringement upon the right to procreate (see CMDA statement on Eugenics and Enhancement).
- The use of a patient's genetic information for societal benefit if such use could potentially harm that individual.
- The reductionist belief that humans and their behavior are simply the product of their genetic destiny.

CMDA is especially concerned about heritable germline or embryo manipulations, as these technologies carry a higher risk of harm and abuse than somatic cell manipulations. First, there is the potential that any errors will be transmitted to future generations. Second, germline manipulations will affect the individual for the remainder of his or her life, whereas some somatic manipulations will be self-limited in duration. Third, the proposed and desired uses of germline technologies are fraught with the strong probability of selfish, narcissistic, and eugenic goals, commodifying offspring, supporting the false concept of genetic reductionism, increasing discrimination and intolerance of the disabled, and increasing the number of early human lives being conceived, then destroyed.

While, in concept, specific single disease-producing mutations could be corrected early in life, which could be consistent with the proper goals of medicine, this process would necessarily alter the germline. Development of germline manipulation technology would irreversibly open the door to proportionately greater harms. This concern is not merely hypothetical. The proven record of maleficence by some scientists, physicians, governments, bioethicists, and social engineers in the historical record and in contemporary experience demonstrates contempt for appropriate ethical boundaries and guidelines.

In conclusion, CMDA opposes:

- All forms of human germline manipulation; these should remain prohibited.
- The use of genetic manipulation to augment human attributes (see CMDA statement on Human Enhancement).
- The deliberate use of genetic manipulation to disable or kill.

In deciding how to apply genetic knowledge in medicine, we should prayerfully seek God's wisdom and guidance, for He is the Author of the genetic code and the Creator and Redeemer of humankind.

Unanimously approved by the House of Representatives
April 26, 2018
Ridgecrest, North Carolina