GENOME EDITING AND RIGHTS AND LIABILITIES OF UNBORN CHILD: A JURISPRUDENTIAL APPRAISAL

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In my judgement, the candidate has met the scholarly standards for this project and has completed the project to my satisfaction, and the formatting, writing style and editorial standards as per the requirement of the institute and therefore, is ready to proceed towards Examination.

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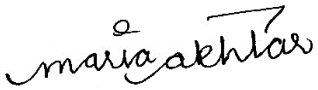
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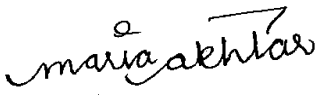
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A NOTE ON TRANSLITERATION

Except for the (') to signify the Arabic letter 'ayn (as in 'Umar or Sharī'ah) and' to represent the hamza (as in Qur'ān). The Hamza itself is only used when it occurs within a word (as in Qur'ān) but not when it occurs at the end (thus 'ulama rather than 'ulama'). In the interest of consistency, the spellings of Arabic and Urdu words, and of Muslim names follow the convention used for Arabic consonants by the International Journal of Middle East Studies. The table of the transliteration is in Figure 1.

TRANSLITERATION TABLE FOR ARABIC WITH UNICODE

Arabic Letter	Capital letter and Unicode	Small letter and Unicode	Arabic Letter	Capital letter and Unicode	Small letter and Unicode
ا	A -	a	ط	Ṭ 1E6C	ṭ 1E6D
ب	B -	b	ظ	Ẓ 1E92	ẓ 1E93
ت	T -	t	ع	' 02BF	-
ث	TH -	th	غ	GH	-
ج	J -	j	ف	F	-
ح	Ḥ 1E24	ḥ 1E25	ق	Q	-
خ	KH -	kh	ك	K	-
د	D -	d	ل	L	-
ذ	DH -	dh	م	M	-
ر	R -	r	ن	N	-
ز	Z -	z	و	W	-
س	S -	-	ه	H	-
ش	SH -	Sh	ي	Y	-
ص	Ṣ 1E62	ṣ 1E63	ء	' 02BE	
ض	Ḍ 1E0C	ḍ 1E0D			

Short vowels		Long Vowels			Double vowels
ـَ	A	ا	Ā 0100	ā 0101	aw = او
ـِ	I	ای	Ī 012A	ī 012B	ai = ای
ـُ	U	او	Ū 016A	ū 016B	

Input of transcript:
1. Insert the appropriate Unicode.
2. Hold down the 'Alt' key on the left side of the keyboard and press the letter 'X' or 'C'
3. the result appears on the screen

ABSTRACT

The field of biotechnology is not static but progressing day by day. Genome Editing technology CRISPR edits the genes that carry diseases and also edits the heritable physical and behavioral characteristics for the production of "designer babies" which poses threats to rights of unborn child. This thesis deals with the main legal question that whether the unborn child is a person to demand the protections and rights and what type of rights it has that would be infringed by the application of this technology. The previous existing literature only discusses the pros and cons of Genome Editing and ignores its relation with the threat to the rights of unborn child. In comprehensive study through critical and analytical research method, this thesis identifies the status of unborn child as a person and its rights and liabilities in Western and Islamic Jurisprudence with reference to Genome Editing. This thesis analyses the case laws of Common Law Jurisdictions and the Human Right Courts for the determination of established rights and liabilities. This thesis explores and analyses the ignored treatment of unborn child in current insufficient set of rights under the International Laws. The legislatures as hesitant to grant unborn status of person, disparaged the status of unborn and infringes the rights of potential human. By taking critical and analytical methods through qualitative conduct of research this thesis provides the framework for countering this emerging challenge by incorporating the preventive measures and balancing approach to the rights of unborn, parent and of scientific researchers.

Key Words: *CRISPR, Genome Editing, International Human Rights Law, Jurisprudence, Personhood, Pakistan, Rights, Liabilities, Unborn Child*

List of Abbreviations

BRCA1 (Breast Cancer 1)

BRCA2 (Breast Cancer 2)

CBL-regulation (Case-Based Learning Regulation)

CCR5 (C-C Chemokine Receptor Type Five)

CCR532 (C-C Chemokine Receptor Type Five-delta 32)

cDNA (complementary Deoxyribonucleic Acid)

CECOS (Centers for Sperm Conservation and Study)

CII (Council of Islamic Ideology)

COVID-19 (Coronavirus Disease of 2019)

CRC (Child Rights Convention)

CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats)

CRISPR-CAS9 (CRISPR-associated protein 9)

DNA (Deoxyribonucleic Acid)

ECHR (European Convention on Human Rights)

EPC (European Patent Convention)

EPO (European Patent Office)

EU (European Union)

FSC (Federal Shariat Court)

GMO (Genetically Modified Organism)

gRNA (Guide Ribonucleic Acid)

HFEA (Human Fertilization and Embryology Authority)

HGE (Human Granulocytic Ehrlichiosis)

HGGE (Human Germline Genome Editing)

HIV (Human Immunodeficiency Virus)

ICCPR (International Covenant on Civil and Political Rights)

ICESCR (International Covenant on Economic, Social and Cultural Rights)

IVF (In-Vitro Fertilization)

LA-RS (Louisiana Revised Statute)

NCRC (National Commission on the Rights of Child)

NIGAB (National Institute for Genomics and Advanced Biotechnology)

PACE (Parliamentary Assembly of the Council of Europe)

PGD (Pre-implantation Genetic Diagnosis)

PPC (Pakistan Penal Code)

PTAB (Patent Trial and Appeal Board)

RGEN (RNA Guided Endonuclease)

TRIPS (Trade-Related Aspects of Intellectual Property Rights)

UAE (United Arab Emirates)

UDHR (Universal Declaration of Human Rights)

UK (United Kingdom)

UN (United Nation)

UNESCO (United Nations Educational, Scientific and Cultural Organization)

USA (United States of America)

USPTO (United States Patent and Trademark Office)

WHO (World Health Organization)

WIPO (World Intellectual Property Organization)

WTO (World Trade Organization)

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