

**Somatic and Germline Therapy, Prevention,  
and Enhancement Applications:  
A South African Perspective**

Prof. Kevin G. Behrens



- As diverse as everywhere else
- Fewer concerns about basic research than somatic interventions than germline interventions
- Fewer concerns about germline research intended for preventing disease than for enhancement
- Openness to cautious, regulated use
- Some fundamental objections on grounds of going “against nature”, “playing God” or sanctity of life



## 1. Risks involved

- Especially risks of unforeseen harm
- Many in favour of applying precautionary principle until science is clearer

# Two Important Common Concerns



## 1. Risks involved

- Especially risks of unforeseen harm
- Many in favour of applying precautionary principle until science is clearer

## 2. Equity

- Conscious of differences in wealth, power between developed & developing world
- Fear based on past experiences of Africans being used in trials with no benefit to Africa
- Concerns about “elitist” medicine



# Three Indigenous African Notions: Implications for Gene Editing



1. The notion of “life force”
2. Moral obligations to future generations
3. Preference for decision making by consensus over majoritarianism

## 1. *The notion of “life force”*



“Life-force has been traditionally interpreted as an intrinsically valuable energy that is imperceptible and constitutes everything that exists. All things in the universe, even apparently inanimate objects such as a grain of sand or drop of oil, are thought to be both good and real by virtue of having some degree of life-force... All beings in the world are thought to participate in the divine energy.”  
(Metz 2018).



# Three Indigenous African Notions: Implications for Gene Editing

## 1. *The notion of “life force”*



“Every illness, wound or disappointment, all suffering or fatigue, every injustice and every failure; all of these are held to be, and are spoken of by the Bantu as, diminution of vital force.” (Tempels, 1959: 46).

“...it is the task of the human person to study the cosmos in order to identify plants, animals, and minerals possessing that force which can liberate one from physical and psychic suffering.” (Bujo: 1998: 211).

# Three Indigenous African Notions: Implications for Gene Editing

## 1. *The notion of “life force”*



- Open to the possibility of gene editing intended to heal
- No more playing God or acting against nature than other traditional practices
- Using ingenuity to augment waning life force of others is an intrinsically good act



## 2. *Moral Obligations to Future Generations*



## 2. *Moral Obligations to Future Generations*



A “...temporal myopia that infects modern [Western] society. The question of obligations to future generations is posed in terms of abstract obligations to possible future people who are strangers to us. The argument is premised on the lack of a sense of continuity of the present with both the past and the future.”  
(O’Neill, 1993: 46).

## 2. *Moral Obligations to Future Generations*



“Of all the duties owed to the ancestors none is more imperious than that of husbanding the resources of the land so as to leave it in good shape for posterity. In this moral scheme the rights of the unborn play such a cardinal role that any traditional African would be nonplussed by the debate in Western philosophy as to the existence of such rights.”  
(Wiredu, 1994: 46).

## 2. *Moral Obligations to Future Generations*



- Advises caution regarding germline editing
- Until there is more certainty about effects on future people, we should not play Russian roulette with genes that can be passed on

## 2. *Moral Obligations to Future Generations*



- Advises caution regarding germline editing
- Until there is more certainty about effects on future people, we should not play Russian roulette with genes that can be passed on
- BUT, the same **strong duty** to posterity might also provide moral justification for altering germline in the interests of future generations
- Especially with respect to prevention of hereditary diseases

## 3. *Preference for decision making by consensus over majoritarianism*



- Serious decisions made by getting community together to talk it out until sufficient consensus reached
- The lesson to the global community is that decisions about something that can affect the future of our entire species should be made in collaboration, and that we should seek to hear as many diverse voices as possible
- **How representative is this meeting, really?**





- Bujo, B. 1998. *The Ethical Dimension of Community*. Nairobi: Paulines Publications
- Metz, T. 2018. Addiction in the light of African values: Undermining vitality and community. *Monash Bioethics Review*. Published on line first
- O'Neill, J. 1993. Future Generations: Present Harms. *Philosophy*, 68: 35-51.
- Tempels, P. 1959. *Bantu Philosophy*. Paris: Presence Africaine.
- Wiredu, K. 1994. Philosophy, Humankind and the Environment. In *Philosophy, Humanity and Ecology*. Edited by Oruka, O. Nairobi: ACTS Press.