**VALUES FOR A NEW BIOPOLITICS**

***Following the 2011 Tarrytown Meeting, David Winickoff, Mark Brown, Emily Beitiks, Marcy Darnovsky, Richard Hayes and Osagie Obasogie met on several occasions to discuss and develop the following draft document, which is still a work in progress. In its current form, it is written specifically for the Tarrytown Meetings and was intentionally kept short, in part by leaving out lengthy examples of the sorts of biotechnologies in question.***

***We’d appreciate any comments. One venue for sharing feedback will be at the “Values for a New Biopolitics” discussion session at this year’s meeting on Tuesday, July 24 from 1:00 - 1:50 pm.***

***Our initial goal is to develop this document into a published essay for a progressive audience. We also envision using an expanded version of it to anchor an edited volume about the values that underlie a “new biopolitics.” We would invite others to contribute essays that respond to, elaborate on, push back against, or depart from the points we make. The expanded essay and the volume as a whole would further explore each of the values discussed and provide more examples of how they might be brought to bear on specific genetic and reproductive technologies and practices, helping connect the many concerns and projects that the Tarrytown Meetings bring together.***

***Following the Tarrytown Meeting, we look forward to revising the essay. We deeply value your feedback and help in improving it, and your thoughts about the possibility of an edited volume. If you would like to discuss any aspect of this project after the Tarrytown Meeting, please contact Emily Beitiks, esbeitiks@geneticsandsociety.org.***

***Social Justice:*** *Biopolitical developments should not only respect, but also promote, the fair and equal treatment of all people regardless of race, gender, disability, nationality, class or other social differences.*

***Human Rights:*** *Emerging technologies should not unduly burden rights to privacy, freedom of expression, autonomy, and agency.*

***The Common Good:*** *Realizing a collective public interest and public deliberation of the common good will be crucial to counter tides of unrestrained individualism, technological division, and human commodification.*

***A Precautionary Approach:*** *Before human biotechnologies are put into use, they should be assessed for their possible harms and benefits to society and the environment, as well as for harms and benefits that may result from not pursuing them.*

***Democratic Governance:*** *Because powerful new biotechnologies are likely to shape people’s lives and life chances in important ways, democratic governance is required to help ensure their responsible development and use.*

**VALUES FOR A NEW BIOPOLITICS**

What many have called “the biotech century” is well underway, and with it has come rapid developments in human genetic and reproductive technologies and practices. From direct-to-consumer gene testing to genetic tests for 8-week-old fetuses, from sex selection to synthetic biology, each year brings new possibilities and prospects. Some biotech innovations may lead to great benefits; others may harm our health, environment, and livelihoods; promote inequality and exploitation; or pose wrenching ethical dilemmas. In part because many are developing in the commercial sphere, they often reach the public rapidly, leaving little time for a critical assessment of how they will affect us as individuals, families, communities and societies.

Despite the prominent public profile of human biotechnologies and the ambitious promises so often made for them, understandings of their implications elude us. Emerging genetic and reproductive technologies press us to reframe established conceptions of science, politics, ethics and government. Technology gets incorporated into everyday life in ways that affect us profoundly but are often not recognized as political. We need to acknowledge that sociopolitical forces are increasingly intertwined with biological matters. The frequent call to “keep politics out of science” obscures the political stakes of many scientific developments.

We use the term “biopolitics” to emphasize the political and social meanings of biological technologies and to encourage a richer political engagement with them. While this term has a long theoretical history, a growing number of scholars and advocacy organizations are now using it to capture the expanding social influence of emerging biotechnologies, the varieties of public policy and political advocacy they are instigating, and the dramatic stakes they hold for the human future.

The dominant currents shaping human biotechnologies today are largely driven by market dynamics. While many commentators and industry actors see consumer preference as the ultimate form of public engagement in technological development, a market-based mode of governance is inadequate for a number of reasons. This relegates the involvement of publics to the back end of technological development, often outside the window of meaningful input. Further, if consumer feedback is the primary mechanism of engagement, then the power to influence will be relative to wealth. Finally, consumers often lack good information, especially for technological commodities, and voices within today’s academy and industry tend to have conflicts of interest. How might we strive for a new collective form of biopolitics, a critical and progressive one–­–one that steers technology away from new and old injustices, towards a better society?

One answer, we argue, lies in conceiving a values-based framework for contemplating and evaluating emerging human biotechnologies. We call for a *new biopolitics*, grounded in a discrete set of values. These are *social justice, human rights, the common good, a precautionary approach,* and *democratic governance*.

**WHY THESE VALUES?**

We arrived at these five values not through an abstract philosophical exercise, but rather from our understanding of particular cases related to human biotechnologies, and the political engagement that surrounds them. Our work was deeply informed by the pitfalls and potentials related to human genetic and reproductive technologies that have been explored by scholars and advocacy organizations. From there, we identified the higher-level ideas and ideals that motivate our concerns. In other words, our approach combines critical analysis of what we see around us today, concerns about potential developments that can be extrapolated from current social and technological dynamics, and a forward-thinking stance toward what we hope new genetic and reproductive technologies will contribute to the human future. Unlike many approaches in bioethics, we do not aim to "apply" these values to bioethical dilemmas as an external moral standard, but rather to highlight their role within emerging biopolitical controversies.

Together, these five values constitute a framework through which we can contemplate the impact of emerging biotechnologies, while acknowledging that different technologies, applications, and practices bring specific and sometimes unique issues to the table. As new technologies and practices emerge, these values will remain relevant.

We see several reasons to articulate values for a new biopolitics. First, we believe that these five values can help make connections and draw people together through shared concern about biopolitical issues. The cultural context in the United States is deeply polarized when it comes to science and technology: most expect those on the religious right to reject science-related developments and bodies of evidence; most assume that those on the left will be enthusiastically supportive. Nonetheless, many activists, academics, policy-makers, and scientists have advocated an alternative approach that supports advances in technology and science but insists that they be watched with a critical eye, evaluated by social and ethical criteria, and governed by democratically crafted policies.

Second, our proposed values help us articulate that we are the agents of our biopolitical future. Our insistence that biotechnological development involves basic values signals our rejection of the notion that technology and science are the only drivers of progress. We focus instead on the complex and hybrid ways in which technologies are imbued with power through social phenomena. But power dynamics can be challenged and rewritten in more responsible and democratic ways, and the values to which we are committed will help guide us toward this end.

We advocate grounding a new biopolitics in these values because in their absence, other values will shape our biopolitical future instead. The verdict is still out on which current developments in biotechnology will yield benefits, which will produce harms, and which will result in some mixture of the two. We propose that a new biopolitics – directed by the values of social justice, human rights, the common good, a precautionary approach, and democratic governance – can help build a lasting framework for moving forward in the face of such uncertainties.

**SOCIAL JUSTICE**

*Biopolitical developments should not only respect, but also promote, the fair and equal treatment of all people regardless of race, gender, disability, nationality, class or other social differences.*

Many biotechnological developments have stratifying and unequal effects based on a person’s background. For some groups, genetic and reproductive technologies offer increased control and power over their bodies, biological conditions, and families, but for others they create new burdens. Bringing a commitment to social justice to our evaluations of human biotechnologies is especially important because of the over-emphasis on market freedom that characterizes the neoliberal paradigm that has become increasingly powerful in recent decades.

At times, social justice in biopolitics is a matter of access. While the rich and privileged increasingly benefit from innovations in genetic and reproductive technologies, others struggle to meet their basic health care needs. Yet, the pursuit of social justice in biopolitics cannot be defined solely in terms of access, for several reasons.

First, some genetic and reproductive technologies benefit pharmaceutical, biotechnology, or fertility companies far more than they benefit patients or consumers.

Second, some practices connected to reproductive and genetic technologies pit certain populations against others. Third party reproduction, for example, poses inherent conflict of rights and benefits. Those who can afford to hire a woman to carry a pregnancy on their behalf are almost invariably in a higher socio-economic stratum than the surrogates.

Third, certain human biotechnologies threaten further discrimination against social groups that have historically been disempowered. In the face of inequalities that are deepening because of economic and political dynamics, a new biopolitics grounded in social justice should strive to prevent this. Previously marginalized groups, including women, people of color, people in poverty, people of the LGBT community, and people with disabilities, could bear a disproportionate burden from genetic and reproductive technologies that bring about new sources of state or corporate power, or new systems of oppression. DNA forensic databases are subjecting communities already under high levels of police surveillance to new assaults. Sex selection, which is significantly worsening in some countries, exacerbates discrimination and fosters violence against women and girls. Technologies that allow the “de-selection” of traits threaten people with disabilities and threaten to revive old ideologies about who is “genetically superior.”

Finally, extreme human biotechnologies are an affront to social justice because they are likely to take us down a path full of profound societal harms. The pursuit of human inheritable genetic modification to create “improved” children, for example, would almost surely exacerbate stratification and could also create entirely new forms of inequality and injustice. Social justice counsels that as we envision the biotechnologies of the near and even distant future, we learn from our troubled eugenic past.

Though historically marginalized groups are particularly vulnerable to many risks posed by human biotechnologies, some are more broadly relevant. The prospect of genetic discrimination – denying individuals insurance or employment based on their propensity for developing a costly illness, for example – threatens to scramble the groups traditionally subject to social injustice. In other words, difference – the basis for social injustice – may be redefined at a molecular level. Genetic illnesses show no prejudices, and so it is entirely possible that the biopolitical value of social justice will broaden its appeal in the future.

**HUMAN RIGHTS**

*Emerging technologies should not unduly burden rights to privacy, freedom of expression, autonomy, and agency.*

The idea of human rights has always had two basic strands: on the one hand, rights to life, liberty, property, and various other individual goods; and on the other hand, rights to free association, free expression, and other conditions of equal participation in the political process. The idea of human rights recognizes the many ways in which all human beings are fundamentally similar. All people of the world have an equal right to exercise and develop their basic human capabilities. Biotechnologies have enormous potential to both help and hinder efforts to realize and protect human rights, as well as to change the political processes through which societies determine what human rights entail.

Including the value of human rights in a new biopolitics signals the importance of protecting individual rights and basic human needs in the face of new genetic and reproductive technologies. Individuals should have a right to genetic privacy, preventing their employers and other institutional powers from looking into their genetic traits. People should be protected from unwarranted government surveillance and intrusion into the population’s genetic information.

Further, we all have a human right to autonomy in the biopolitical realm. Traditional bioethics has advocated for patient autonomy in relation to doctors; a new biopolitics should also advocate for the rights of individuals to choose whether to share their genetic information or participate in biotech research.

While demands for human rights often focus on threats to individual autonomy and personal liberty, we see human rights as embedded in a larger social context. We include “human rights” in the set of values that we believe should ground a new biopolitics in order to emphasize the importance of navigating the tensions between individual liberty and social justice.

New and emerging human biotechnologies raise a novel question for the tradition of human rights: What does it mean to speak of “human rights” when the “human” itself is being called into question? Genetic manipulation with the aim of “human enhancement” would risk taking humanity across a threshold that could not be uncrossed, now or in future generations. These kinds of developments in human biotechnology challenge us to consider how we understand human rights today, and what human rights may entail in the future.

**THE COMMON GOOD**

*Realizing a collective public interest and public deliberation of the common good will be crucial to counter tides of unrestrained individualism, technological division, and human commodification.*

Controversial biotechnology-related practices are often defended by invoking market freedoms or individual autonomy, with little or no attention to their societal consequences or their ethical and moral status. Some argue in favor of unrestrained sex selection, for example, by deploying the notion of “procreative liberty”; concerns about the exacerbation of discrimination against women and girls and the impacts of skewed sex ratios are glossed over. The patenting of human genes is portrayed as an ownership right, with no mention of the very different perspective that considers the genome what UNESCO calls “the common heritage of humanity.” Speculation about genetic manipulation or synthetic biology-based techniques to “enhance” future generations is treated as the apex of “self-improvement” without considering that such practices would likely create entirely new forms of inequality and discrimination.

These sorts of arguments bespeak the neoliberal vision of a world composed of individual economic actors operating only in their narrow self-interests, with responsibilities only to their own enrichment. But none of us live in isolation from families, neighborhoods, or communities, and none of us operate according to pure economic motivations; it is simply inaccurate to understand any society as an aggregation of individuals pursuing their own needs and interests. Our well-being depends in countless direct and indirect ways on other people and institutions both formal and informal; our actions affect others and society as a whole. Both our rights and our obligations are embedded in communities and societies.

The idea that individuals should simply pursue narrow self-interest in politics winds up putting the privileges of the few above the public interest and the common good. A commitment to the common good, by contrast, nurtures social solidarity and service to broader purposes and goals. It challenges both citizens and political leaders to pursue policies and programs that benefit everyone, and recognizes government as an essential tool for regulating corporate and commercial activities that harm people or the environment.

A common good approach protects the public domain and “the commons,” both as a matter of justice and as a symbol of social solidarity and shared culture. It challenges the trend toward privatizing resources formerly held in common or in trust for the benefit of the community as whole.

A common good approach also recognizes that moral questions that shape the society we wish to build are matters for public concern and democratic governance, and should not be relegated to the private sphere. Like both republican and communitarian approaches, it contrasts with the kind of liberalism that insists on neutrality with respect to what constitutes the good. And a focus on the common good is also not a utilitarian call for “the greatest good for the greatest number.” Instead, it treats deliberation about a shared vision of the public interest as a defining characteristic both of the virtuous individual and the good society.

**A PRECAUTIONARY APPROACH**

*Before human biotechnologies are put into use, they should be assessed for their possible harms and benefits to society and the environment, as well as for harms and benefits that may result from not pursuing them.*

Traditionally applied to issues like climate change and species extinction, we have included the precautionary approach as one of our foundational values as a reminder of the cross-cutting ways in which suites of technologies bear upon one another and could have unpredictable and problematic impacts on the fundamental processes of the environment, whether operating at the level of plants, animals, humans or ecosystems.

We recognize that some will object to a precautionary approach, arguing that adopting it would slow innovation and progress. We note that a precautionary approach is fully compatible with support for many new biotechnologies and the interventions they make possible. At times, the application of precaution results in the adoption of new technologies with adjustments that prevent or minimize adverse results. A precautionary approach ensures that we attend to the powerful consequences, intended or not, that many biotechnologies bring forth, and that we take the time to explore these before widespread implementation results in irreversible consequences. This is especially crucial because of the hyperbole that surrounds many biotechnology innovations.

Environmentalists evaluating the field of synthetic biology have called for a precautionary approach in the face of plans to release novel synthetic organisms into the wild. They point out that the effects of these novel organisms on human health and the environment must be assessed before they are released, a requirement that is particularly urgent because of the likelihood that once released, they cannot be recalled. Many other genetic technologies may pose similar threats, taking us over thresholds that cannot be re-crossed. A precautionary approach helps us assess where these thresholds are before (and if) we cross them.

If it is safe to assume that the aim of biotechnology innovation is to minimize human suffering and to contribute to human well-being, then precaution is warranted to help ensure that we do not cause harm in the pursuit of good.

**DEMOCRATIC GOVERNANCE**

*Because powerful new biotechnologies are likely to shape people’s lives and life chances in important ways, democratic governance is required to help ensure their responsible development and use.*

We use the term "democratic governance" to indicate that democratic norms should extend beyond electing government officials. We need to identify and in some cases create democratic mechanisms that will give people the ability to help shape the powerful forces that shape their lives, including new biological technologies.

Many institutions shape biotechnology, including public and private agencies, private companies, multinational corporations, civil society organizations, and transnational institutions. Because these different institutions have different purposes, they are subject to different democratic norms. For example, one might want a private biotech lab to be publicly accountable for its use of taxpayer money, or a government bioethics advisory body to include a socially diverse range of perspectives. The norms of democratic governance – including public participation, deliberation, accountability, and transparency – apply in different ways in different institutions and jurisdictions. Whatever form it takes, democratic governance helps ensure that those affected by biotechnology have a say in its development and use.

Democracy is simultaneously one value among others and the best means for negotiating conflicts over other values. Democracy holds a certain practical priority over other values, because democratic processes are usually the best means of managing disagreements about those other values. People disagree about social justice, human rights, the common good and the precautionary approach. Some of these disagreements result from misunderstanding, misinformation, or sheer self-interest, but some moral disagreements rest on deep cultural, religious, or philosophical differences. Such differences are sometimes both reasonable and irresolvable. People also disagree about democracy, of course, but only democracy provides a way for people to reach agreement on how to accommodate their other values. And when democracy fails to produce such agreement, as it often does, democracy is the best way of creating policies that citizens are likely to recognize as legally binding and politically legitimate.

Biotechnology is inevitably shaped by various implicit social values and economic interests. The democratic governance of biotechnology helps reveal these values and interests, and subjects them to public scrutiny. It also attempts to guide biotechnological development and use with explicit policy decisions. Democratic governance of biotechnology can take many diverse forms of public engagement, ranging from lobbying and litigation to public hearings and citizen juries to protests and boycotts. People may not always agree that such policies are good or just, but they will have reason to temporarily accept them if they are to some degree democratic.

Most bioethical argument in the United States has focused on conflicting interpretations of individual rights and social justice, rather than on public participation in decisions about new biotechnologies. Most bioethicists have seen their task as providing philosophical arguments that persuade others to adopt a particular view of stem cell research, genetic enhancement, or some other bioethical issue. Liberal bioethicists typically offer one set of arguments, conservative bioethicists a different set. Occasionally, both liberals and conservatives have gone beyond merely offering arguments and have denied the very possibility of other reasonable views. To this extent, they have undermined democratic deliberation and debate. Of course, we also have specific views of various bioethical issues. But we explicitly recognize the existence of deep conflicts over biotechnology. Therefore, in addition to presenting our own best arguments about the governance of biotechnology, we promote democratic institutions that enable people with different views to find mutually acceptable policies.

**CONCLUSION**

We have proposed a values framework for a new biopolitics that is based on social justice, human rights, the common good, a precautionary approach, and democratic governance. Individually, none of these five values adequately addresses the range of nuanced issues that human biotechnologies raise. But we suggest that together, they provide a framework through which to guide biopolitical choices, facilitate critical thinking, and open public debate.

We are well aware that these values are sometimes in conflict with each other. Indeed, we think that the process of weighing and navigating the tensions among them is a necessary part of the challenging work that is entailed in seriously evaluating genetic and reproductive technologies and practices.

Our hope is that, unlike many values statements that live only on paper, values for a new biopolitics can promote action. We base this hope on several observations.

First, these values connect the dots among the diverse concerns already being raised about human biotechnologies, and they can help bring together scholars, advocates, and policy-makers who are addressing one or another technology or practice, even if they have not yet addressed the bigger picture. This process can help strengthen their recognition of shared concerns, and ultimately their sense of shared purpose.

Second, despite the rapid speed with which human biotechnologies are developing and being deployed in clinics and markets, it is not too late to influence their shape or path. The five proposed values for a new biopolitics help us envision how to develop and use human biotechnologies toward a better human future, and invite others to participate in building it.

Lastly, invoking these values for “upstream” analyses of the biotechnologies in question points toward effective interventions. By the time a particular technology comes into widespread use, money has been invested, control has been established, and it is often too late to make changes. We need to look to values for a new biopolitics throughout all stages of the technoscience life cycle, but put particular weight on intervening proactively, before the hype of biotechnology distracts the public from the possible underlying concerns and risks.

Too often, decisions about human biotechnologies are controlled by corporate interests, put the well-being of marginalized populations at risk, exacerbate rather than narrow inequalities, and prioritize the desires of the privileged few over the common good. A new biopolitics – guided by social justice, human rights, the common good, a precautionary approach, and democratic governance – can open a new path toward biotechnological progress worthy of strong and broad support.