

IGSP Internal Assessment and Planning ("IGSP 2.0")

Planning in anticipation of a review in our 10th year

To all faculty, students and staff in the IGSP:

When Duke proposed establishing a new campus-wide Institute for Genome Sciences & Policy in 2000, it was conceived as an interdisciplinary group of centers involving faculty and students from across the campus. After my recruitment as Institute director in late 2002, the IGSP emerged as a centralized Institute with component centers that have in turn taken on very different functions, with different programmatic emphases, different connections to individual schools and different financial foundations.

This model has served both the IGSP and Duke well for the past eight years, producing a series of thematic but flexibly run centers to coordinate development and implementation of IGSP missions in research, education and service. Individual centers have adopted different "personalities." Over time, the roster of IGSP centers has adapted to changes in the genome landscape, both at Duke and beyond; new IGSP centers have been formed in response to institutional needs and opportunities, while other centers have moved outside the Institute to become school-based centers in order to carry out their more tightly focused and autonomous missions. In addition, some IGSP faculty, students and staff regularly participate in IGSP-wide activities and in less formal research groups that transcend individual centers.

In reviewing our progress over the past eight years, a dichotomy among the centers has become increasingly apparent: some centers have focused their efforts programmatically around particular research themes and specific funding opportunities, while others, initiated in response to university-wide needs at the time, have organized around technology or analytical platforms to provide then-new capabilities to the Duke community. Indeed, it has been gratifying to see the degree to which various genome-based technologies and approaches have now become integrated broadly into the intellectual agendas of faculty and students all across campus; this validates the initial creation of those centers and yet calls into question the continuing formal organization of activities based on these specific platforms. It may be that our faculty and students would be better able to address current and future scientific opportunities if organized more flexibly along programmatic lines.

Unquestionably, the world of genomics – whether viewed through the lens of science or society – is very different now than it was back in 2000 or even just a few years ago. While the demands of anticipating and adapting to a landscape of ever-changing science have shifted, the consequences for and the engagement of society have only deepened, which invites – even requires – new strategies to meet new opportunities and challenges. Thus, it is time to consider ways in which the organizational structure of the IGSP might adapt to better serve our diverse IGSP missions and to encourage leadership and entrepreneurship in selected domains of science and/or policy.

It is auspicious timing for a broad, across-the-board look at our structure, to be sure that we are best addressing the needs of and capturing the creative energies of those both in and beyond the IGSP across the Duke campus. As stipulated by the Provost's Office, Duke's seven University Institutes are each scheduled to be reviewed every five years. IGSP was last reviewed in 2007, and we therefore anticipate being reviewed again in 2012-2013.

In preparation for our tenth-year review and to assess whether our current organizational structure and intellectual balance is optimal for the future of the genome sciences and policy, I am initiating a two-phase evaluation and planning process to be carried out over the coming months. Phase I, to begin immediately, will involve a review of critical aspects of the IGSP's mission and structure from an organizational point of view, in light of the rapidly evolving landscape of scientific and social opportunities and challenges that mark our field. Phase II will focus strategically on programmatic initiatives and opportunities, partnerships, and priorities that will guide the shape of IGSP in 2012 and beyond – what one might call "IGSP 2.0".

While the planning process needs to be carried out without prejudice with respect to the organization of groups in the IGSP in the long-term, some IGSP centers will continue to operate and advance their programs during this period. Others, however, will be phased out now, in order to open up the full range of options for reorganizing to address new needs and opportunities. All core functions and regular activities in the IGSP will continue in the interim, managed centrally in the IGSP while the evaluation and planning process takes place over the coming semester.

In Phase I of this process, a series of working committees will be formed, to include IGSP faculty, IGSP staff and, where desirable and advisable, other faculty and/or students. We welcome and will actively encourage input and comment from all of you in the IGSP, as the committees begin their work.

- 1. Organizational structure (to be led by Greg Wray). This group will explore how best to coordinate and optimize research and scholarly activities of faculty in different groups, spanning the generation and use of genome-derived information in the context of science, medicine and society at large. Do we need to be organized around 'centers'? If so, what criteria should determine this and how autonomous should such centers be? Or are there other organizational configurations that would better serve and enable the missions of the IGSP? How might we be best organized to fully engage faculty, staff and students, both in the IGSP and across the Duke campus? How do we most effectively encourage creativity and foster emerging leadership among our faculty?
- 2. Analytical and service infrastructure (to be led by Mark DeLong, working with Holly Dressman and Greg Wray). A group to explore the resources needed to support research within individual research groups, in IGSP core facilities, and in teams of researchers working on large datasets. What are our infrastructure needs? What staff and/or faculty are needed to broadly enable a rigorous and responsible analytical pipeline? How would such computational, statistical or informatic expertise be provided?
- 3. **Translation and application of genomics** (to be led jointly by Geoff Ginsburg and by Bob Harrington, Director of the Duke Clinical Research Institute). While the IGSP has always been scientifically grounded in fundamental and discovery science, a long-term goal has been to promote discoveries relevant to the future of medicine. This group will explore the translational goals of the IGSP and relationships among various entities at Duke with similar or related

responsibilities and missions. Where should IGSP activities stop and other translational units and/or partners begin? What functions, activities and responsibilities are appropriately based in IGSP? What functions, activities and responsibilities should be based elsewhere? And should IGSP seek to partner with other groups where missions and/or capabilities overlap?

- 4. **Education and training** (to be led by Tomalei Vess, working with faculty, students and postdocs in the IGSP). This working committee will explore the educational mission of the IGSP across the full range of IGSP scholarly activities and at all levels, both in the classroom and in the laboratory. What is the mission of the IGSP in education, targeted to what groups? Which activities or interests should be led by those in the IGSP and which should be based in various departments or schools? What partnerships or resources are needed to carry out this mission?
- 5. Administrative services and functions (to be led by Chris Tobias). A group to explore the resources necessary to serve IGSP faculty in support of our mission, such as grant support services, human resource management, financial reporting, etc., in addition to faculty mentoring and career development. What services or functions are needed? What services could be improved? Are they ideally managed by different centers and IGSP central? Where should responsibilities lie?

Each of the five working committees will be charged with performing an in-depth evaluation of the area in question, soliciting input from across the IGSP, considering various models as they address the questions raised, and making recommendations to me and to an overall "IGSP 2.0" Planning Committee that will guide this process over the course of the year.

Phase II of the planning process will kick off later in the year. Building on the results of Phase I, the purpose of Phase II will be to make decisions about the recommendations from the working committees and to use that as a base for considering themes, both new and old, to guide the development of "IGSP 2.0" in a way that exemplifies our interdisciplinary, cross-campus reach, spanning both genome sciences and policy. Such a plan, building on and extending the strategic planning effort we undertook in 2006, should both reflect and encourage the organizational and thematic flexibility inherent in the design of institutes at Duke.

Most importantly, I want to encourage energetic participation in this process on the part of everyone in the IGSP. You are the future of the IGSP, and your voice is essential to ensuring that we are both structured optimally and aimed in the right direction to meet the extraordinarily exciting but challenging opportunities ahead. By articulating our new organizational principles – perhaps quite different from the ones we began with nine years ago – and ensuring that the plan has support and energy throughout the Institute, we will be in the strongest possible position to continue to achieve distinction and leadership in this field.

Hunt Willard January 2011