University of Wisconsin–Madison
Reaccreditation Self-Study

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Team 3:
Creating an Impact and
Shaping the Global Agenda

*"How can we engage in, and help solve,
emerging challenges to the world?"*

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I. EXECUTIVE SUMMARY

A. *The Challenge*

Growing population … globalization of the economy … diminishing energy resources … changing patterns of climate … new challenges to governance ... loss of biological diversity … increasing numbers of dispossessed people and refugees ... losses of traditional cultures ... emerging diseases ... mounting concern about rogue states, terrorism, and weapons of mass destruction … growing potential for international conflicts over disparities in resources and living conditions …

The history of the twenty-first century—and the ultimate success or failure of our civilization—will be defined largely by our collective response to these challenges.

Although we recognize the importance of these pressing global problems, U.S. universities have been slow to confront them. When looking across the major research universities of the United States, the most visible initiatives one sees are focused on more immediate, market-driven problems, such as those stemming from breakthroughs in biotechnology, drug research, nanotechnology, and information systems. While these are all critical areas of research and inquiry, they do not directly address the most pressing concerns listed above – including those linked to poverty, environmental sustainability, security, terrorism, climate change, global hunger, and human rights.

Why aren't U.S. universities making these global challenges a top priority? Where are the university institutes and departments on human rights? Terrorism? Security? Sustainability? Hunger? If we are not making these a top priority, who will?

B. *Our Response*

Where most universities have failed to accept the most pressing challenges facing the world, the University of Wisconsin–Madison is poised to succeed.

At the UW–Madison, many faculty, staff, and students are already working on the cutting edge of these important global issues—not only in expanding our understanding of our changing world, but also in connecting this understanding to decision making, public policy, and real-world practice. More than nearly any other university, our faculty, staff, and students are personally dedicated to pushing the frontiers of interdisciplinary research, and to using this new knowledge to make the world a better place. The Institute for Research on Poverty, Nelson Institute for Environmental Studies, La Follette School for Public Affairs, International Institute, and the Division of International Studies have established themselves as leaders in these arenas. These are tremendous strengths to build upon.

Here we propose a major initiative for the university to address pressing global problems. This strategic investment will propel the UW–Madison to the forefront of applied problem solving, and engage the university broadly in the global arena.

C. Our Approach

Over the course of three separate retreats during the winter of 2007–08, our team met to discuss what it meant to this campus to "Create and Impact and Shape the Global Agenda." Drawing upon these discussions, as well as other conversations with hundreds of experts, across the university community and beyond, we compiled a vast list of "urgent global challenges." It is a daunting list, ranging from climate change to disappearing cultures, from emerging infectious diseases to civil rights, from nuclear terrorism to bioethics. Such a list can initially appear disjointed, or simply a roster of gloom and doom.

But we were able to discern a short list of underlying patterns behind the diverse global challenges. In fact, our team defined *four major, overarching themes* that embodied the broadest, most exciting, and most relevant areas where the university can act as a global agenda-setter for the twenty-first century:

- *Sustaining the Human-Environment System.* As we learn more about the changing nature of the global environment, we find that the conditions of our ecosystems and natural resources—including the air, water, land, and biological diversity we depend on—are deteriorating rapidly. It has become especially clear that understanding these global environmental changes requires attention to the interconnections among social and ecological systems across scales, from the village to the globe. At the University of Wisconsin–Madison, we have a rare opportunity to transcend disciplinary divides to make a more meaningful impact on global environmental issues. Already, UW–Madison has pursued new experiments in cross-disciplinary institution building in this critical area, and is poised to do much more.

- *Improving the Human Condition.* The world faces tremendous challenges to public health, international peace, security, education, and prosperity. Many of the world's poorest people already face immediate, life-or-death threats from disease, water scarcity, food shortages, environmental pollution, conflict, and violence. Additional concerns about international equity and justice increase dissatisfaction with the current distribution of power. Given these pressures—combined with increasing concerns over terrorism, globalization, and human rights—we must improve our understanding of the underlying drivers of human health, security, and conflict.

- *Reimagining Governance.* Old ideas about the geography and institutions of governance no longer capture the complexity of today's experience. A more modern approach takes three interrelated views to the study of governance: (1) new studies of governance must cross traditional state boundaries and revisit assumptions about state sovereignty; (2) emerging forms of global governance will alter definitions of citizenship; and (3) reforms and research in global governance are encouraging new forms of experimentation. The UWMadison is uniquely poised to reimagine the role of governance, and its many changing forms, in today's world.

- *Using Ethics and Meaning to Guide the Future.* A strong, self-conscious commitment to *values* must underpin the newest and most important work in universities. These values will grow from conversations between technical and humanistic thinkers at all stages of the research process—conceptualization, analysis, publication, and application. An emphasis on values will seek to assure a deep connection between the global and the local, including attention to diversity. An emphasis on values will deepen the applied dimension of our research, ensure that our work advances ideals of justice and equity, strengthen our sensitivity to social and cultural identities, and keep the importance of serving *the greatest public good* foremost in everything we do. Without a focus on values as the glue that holds the multiple dimensions of the university's work together, we cannot have the global impact we seek. With clear-eyed attention to values and meanings in our research we have an opportunity to make our work serve a broader and more enduring public audience.

These themes are ambitious and practical, scholarly and policy-relevant. They bring the university to the globe, and the globe to the university.

D. *A Call for Institutional Transformation*

Our university is filled with pioneering scholars in very diverse disciplines. Although these scholars consistently produce groundbreaking research, their work is frequently completed in near isolation from the work of colleagues in other disciplines. Similarly, researchers on campus often operate with little connection to the policy institutions, businesses, and other groups outside the academy that have non-academic uses for their knowledge. Specialization—within disciplines and between the university and other parts of our society—has limited the global reach of our research on campus.

At this juncture, reinvigorating the Wisconsin Idea requires new institutional incentives for both interdisciplinarity and real-world problem solving. We need to nurture careers that mix specialization and generalization, academic rigor and pragmatic application. We need to make contributions to global human flourishing—not discipline-centered metrics—the long-term standard for our faculty and staff, our students, and our institution as a whole.

E. *Investments in Intellectual and Human Capital*

We believe that the university should make critical investments in intellectual and human capital, which will require clear priorities and strategic decision-making.

Our university does not have the resources to do everything. Many of the successful investments in intellectual capital from prior years are not entirely appropriate for the global agenda of the university in the twenty-first century. In particular, we believe the university needs to give more attention to investments in activities that encourage broader interdisciplinary collaboration, deeper partnerships between academic researchers and outside stakeholders, and more extensive intellectual risk-taking.

Our team suggests several such investments:

- **A Transformed Sabbatical Program.** One relatively easy program to implement would be a new "internal sabbatical" system. This system would encourage faculty and academic staff to take sabbaticals *on campus* in groups, focusing on new, cutting-edge, collaborative areas of work, and, in many cases, launch major, new UW–Madison-based projects.

  Faculty teams would apply as a group for this innovative program. Successful proposals should show potential for creativity, truly collaborative activities, long-term institutional benefits, and a commitment to engaging in outreach and other real- world outcomes.

  To make the internal sabbatical system effective, the university must provide central space for sabbatical faculty and academic staff, so that they may work on (or near) campus, but away from their regular offices. Furthermore, basic administrative and IT support would be provided to each team. In the early stages of the program, the internal sabbatical program may choose to focus on targeted, innovative research themes—perhaps leveraging investments made in the cluster-hiring program, or priorities highlighted in this document.

- **Shift Allocations of Annual Graduate School Fellowship and Research Competitions.** Aiming high requires a more strategic allocation of internal research funding and graduate fellowships. We believe that the Graduate School should set aside a fraction of its graduate fellowships and annual research competition funds from WARF for *specific thematic research priorities*, initially matching those in this report. These themes should be explicitly interdisciplinary, covering the entire campus, and designed for broad and deep global impact. The themes should change over time.

  We believe the Graduate School should use these global themes to guide its initial strategic investments of resources. For example, the Graduate School might consider disbursing some graduate fellowship money as small *graduate training grants* to groups of faculty working on dynamic projects that address research priorities and promise to recruit some of the best Ph.D. students—in organized cohorts—to UW–Madison.

  We also believe that a more strategic Graduate School research vision will help to encourage the Wisconsin Alumni Research Fund (WARF), outside stakeholders, and others to increase their resource allocations to the campus as a whole for intellectual development. By targeting research resources we can also expand research resources for everyone.

- **Advanced Leadership Training.** Another critical element of investing in our human resources is to provide in-depth leadership-training opportunities to our faculty and staff. Such a program would allow for new kinds of professional opportunities—especially in linking our faculty and staff to colleagues in media, government, business, and the nonprofit sector.

  Many faculty and staff, especially those in midcareer and senior positions, would greatly benefit from advanced leadership training, helping them to extend their work beyond the

university and connect to outside partners. We envision a program that would involve two major, weeklong units: one focused on leadership, public communication skills, and media relations; the second focused on building partnerships across government, industry, and nongovernmental organizations (NGOs).

F. *Investments in New Institutional Structures: The Wisconsin Alliance for Global Solutions*

The global societal challenges discussed above are very complex. To address them successfully, we must understand their causes and consequences clearly, and we must confront them directly. As repositories of knowledge and agents of discovery and innovation, universities can lead the way. Yet when persistent problems evolve and new ones emerge, our traditional funding sources—government and private foundations—are often slow to react, and valuable time is lost. Even when funding is timely, we lack mechanisms for translating the fruits of research—good ideas—into action. We need a *new institutional structure for mobilizing and publicizing our most innovative and exciting global research*. We need a new institutional structure to make our university *the* place for global solutions in the twenty-first century.

We propose the creation of a new institutional space on campus explicitly committed to engaging in, and solving, the world's most challenging problems—the *Wisconsin Alliance for Global Solutions (WAGS)*. A primary purpose of this organization will be to nurture the kinds of cooperation among scholars that would not occur otherwise, and to build long-term partnerships between the university and our outside partners in business, media, government and civil society. The Alliance will not focus on one particular project, but instead focus on evolving research themes (initially those listed above, but changing every several years to reflect new global challenges), and aim to create long-term partnerships across the campus and beyond.

The Wisconsin Alliance for Global Solutions will be a hub for truly interdisciplinary innovation and external engagement. That is our deepest goal—to nurture innovative answers to the pressing problems of our new century.

We believe that WAGS will:

- make the UW–Madison the world's "go-to place" for solutions to our most challenging global problems;
- make the UW–Madison the key, trusted "matchmaker" for innovative partnerships—among academia, government, industry, and civil society—to solve specific global problems;
- and make Wisconsin a respected incubator for energy, engagement and creativity among students to change the world, unleashing a new generation of leaders to solve these great societal challenges.

If successful, WAGS will make the University of Wisconsin–Madison *the* place for finding and sharing new global solutions in the twenty-first century. The innovations emerging from

WAGS will draw attention and application around the globe. They will also inspire more work of the same kind around campus. Most significantly, WAGS will not become a single-issue think tank, but continually remake itself to encompass new research and address new problems. This, after all, is the deepest mission of a great university.

The Challenge

Growing population … globalization of the economy … diminishing energy resources … changing patterns of climate … new challenges to governance ... loss of biological diversity … increasing numbers of dispossessed people and refugees ... losses of traditional cultures ... emerging diseases ... mounting concern about rogue states, terrorism, and weapons of mass destruction … growing potential for international conflicts over disparities in resources and living conditions ...

The history of the twenty-first century—and the ultimate success or failure of our civilization—will be defined largely by our responses to these issues.

Although we all recognize the importance of these pressing global problems, most U.S. universities have been slow to confront them. Looking across the U.S. academic landscape, the most visible initiatives are in two different arenas. The first is focused on breakthroughs in technology-driven science and engineering, particularly in biotechnology, nanotechnology and information systems. The other is focused on maintaining the core areas of traditional scholarship within the humanities, social sciences and natural sciences. (At many universities, there is an increasing tension between these two foci, especially where resources for traditional scholarship are drying up.) While these are all critical areas of research and inquiry, they do not directly address the most pressing concerns listed above—including those linked to poverty, environmental sustainability, security, terrorism, global hunger and human rights.

It is an interesting paradox that intellectual leaders across the country clearly recognize the urgency of pressing global challenges, yet many of our top-tier universities are not making them a highly visible priority. Why aren't all U.S. universities making these global challenges a top priority? Where are the university institutes and departments on human rights? Terrorism? Security? Sustainability? Hunger? If we are not making these a top priority, who will?

One possible reason for the failure of U.S. universities to focus on these critical global problems is the lack of broader societal and market support for them. Most funding agencies, private foundations, corporations and legislatures—with some notable exceptions, such as the Gates Foundation and Google.org—have not made these issues a high priority either.

Another reason for this failure is that many of these global challenges are complex and rapidly changing. They defy our traditional disciplinary approaches to knowledge. Given these circumstances, how will higher education, and the UW–Madison in particular, rise to meet these challenges?

II. REAFFIRMING THE WISCONSIN IDEA

Many colleges and universities are struggling with the balance between investing in new, technology-driven research and preserving excellence in the broader array of fundamental disciplines. At many universities, there is a sense that two forces pulling at the fabric of the campus, sometimes leading to a feeling of "either us or them," resulting in an even stronger sense of a *two cultures* divide.

There may, however, be another way to look at this problem. Instead of focusing on the two-way tension between the need for investing in technology-focused research (e.g., biotechnology, nanotechnology, and information technology) and the need to strengthen the broad array of scholarly disciplines (i.e., from across the humanities, social sciences and natural sciences), perhaps a moderating, third perspective should be introduced—a perspective that focuses on *serving the greatest public good.*

We need to shift the focus of the university away from the false choice of having *either* strength in technology-driven research *or* strength in broader scholarship across the humanities, social sciences, and natural sciences. That choice is based on a false understanding of resource dynamics, and ignores many of the underlying forces at work on the academic landscape, including the fundamental shift in public support away from the traditional mission of state universities.

Instead of focusing on this false choice, we posit that there is much to be gained from a creative and respectful dialogue across three axes of consideration:

- How can the university maintain excellence in all areas of scholarship—ranging across the humanities, social sciences, and natural sciences—even if their immediate "return on investment" is less tangible and direct? How do we continue our investment in these critical fields and demonstrate their benefit to society through broader public education, long-term payoffs from new knowledge, and an enriched human spirit?

- How can the university accelerate research and development in areas of intense societal and market interest? Today, these investments are largely focused on astonishing breakthroughs in biotechnology, nanotechnology and information technology, which are likely to transform the world around us. How can we maintain this technology-driven research excellence, and make critical breakthroughs in other arenas in the future?

- And how can the university best serve the public good? How can the university contribute to the world—not only in terms of new technological innovations, but also in terms of pressing global challenges, such as those linked to poverty, environmental sustainability, security, and human rights?

In the future, a good university will focus on the first two questions. But a *great* university will address all three, and nurture innovation at their intersection point. Creativity and risk-taking across traditional disciplines are essential and they must be incentivized.

At Wisconsin, we should understand this lesson especially well. We have long held that we have a moral obligation to *serve the greatest public good*, even if current societal forces, or the need to preserve our scholarly excellence, do not drive us there. But, instead of focusing attention only on problems that have immediate technological solutions, or those that stem from our deep scholarly traditions, we must also find ways to respond to our complex, and often neglected, societal challenges.

As a great *public* research university, we have a special obligation to connect a major portion of our work to the needs of the state, the nation, and the globe. That is our stated mission. As we approach the one-hundredth anniversary of the Wisconsin Idea, we need to renew its practice and remind ourselves of its deeper meaning.

III. AN OPPORTUNITY FOR UW–MADISON

"The Future is up for grabs. It belongs to any and all who will take the risk and accept the responsibility of consciously creating the future they want."

—Robert Anton Wilson

Where most universities have failed to address the most pressing challenges facing the world, the University of Wisconsin–Madison is poised to succeed.

At the UW–Madison, many faculty, staff, and students are already working on the cutting edge of these important global issues—not only in expanding our understanding of our changing world, but also in bringing this understanding to decision making, public policy, and real-world practice. More than nearly any other university, our faculty, staff, and students are personally dedicated to pushing the frontiers of interdisciplinary research, and to using this new knowledge to make the world a better place. These are tremendous strengths to build upon.

Furthermore, the UW–Madison has a special ability to conduct new research and outreach efforts to help countries work together to solve emerging global problems. Issues such as climate change, global poverty, international terrorism, human rights, unequal access to education, and emerging threats to public health all implicate core sectors of global and national economies. International institutions, governance regimes, and legal concepts must evolve to become much more robust systems that not only address these global challenges effectively, but also more faithfully reflect and accommodate deep-seated national differences in political culture. Put simply, **we need to find ways for people around the world with vastly different access to financial, technological, and natural resources, and often very different cultural traditions, to live together as a global community in peace and security**. We believe the UW–Madison can help bring this about.

Over the last few decades, the university has launched several major initiatives in international affairs, human rights, global environmental sustainability, poverty, public health, economy, and global security. These include the Human Rights Initiative, the Center for Sustainability and the Global Environment, the Institute for Research on Poverty, the Population Health Institute, the Center for World Affairs and the Global Economy, and the International and Environmental Affairs and Global Security cluster hire through the International Institute. Yet neither UW–Madison nor its peers in these areas—Yale, Duke, Michigan and UC–Berkeley—have built cohesive, campuswide programs in addressing our society's greatest global challenges. Only Stanford University appears to have organized its strategic plan, and fund-raising goals, around these priorities. Their efforts are inspirational, but there is much more we can do based on our strong faculty, our research breadth, and our deep tradition of public service.

Here we propose a dynamic reinvigoration of the university to address pressing global problems. This strategic investment will propel the UW–Madison to the forefront of applied problem-solving, and engage the university broadly in the global arena. For several reasons, we believe this is the opportune time to make this transformation.

- *There is a growing demand for global solutions and leadership*. The scope and pace of change in global affairs is growing more rapidly than ever before. In response, government agencies, transnational corporations, and nongovernmental organizations have greatly expanded their international policy and decision-making programs. There is now an urgent need for managers, administrators, and analysts with greater knowledge of these issues, as well as for scholars with greater awareness of public affairs.

  Most important, there is a need to expand the awareness of the average citizen of the complexities of our global challenges. The UW–Madison should offer world-class undergraduate and graduate programs in these important areas.

- *It is time to rethink the geographic focus of the Wisconsin Idea*. Many of our key constituents—including legislators, business leaders, alumni, and parents—encourage us to focus entirely on problems of Wisconsin, not the world outside.

  Most of the challenges in our state—whether surrounding the need for high-paying jobs, entering new global markets, sustaining our agriculture, or handling our energy and environmental challenges—are inherently national and global in scope. The solutions to Wisconsin's greatest problems require exactly the global perspective that only the university can provide.

  We believe that we should be even more assertive in addressing national- and global-scale challenges. Although we are a state-supported institution, our obligation to serve the public good does not stop at the borders of Wisconsin. In fact, global and international work does not dilute our obligation to the state; it reinforces it. By

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addressing problems across regional, national and global scales, we believe we will better serve the citizens of Wisconsin.

- ***Opportunities for attracting support are growing rapidly***. Many donors and private foundations are beginning to focus on these emerging global challenges. Large private foundations—including Packard, Gates, Pew, MacArthur, Ford and Rockefeller Brothers—also support the integration of natural and social science toward solving emerging international problems.

  In additional, there is increased funding for assessment and action in these areas through the World Bank, the IMF, the UN Environment Program, the UN Development Program, and the Global Environmental Facility. Our proposed initiatives would help position the UW–Madison to compete effectively for these awards.

- **Wisconsin is ideally positioned to embark on this innovative endeavor—if we act soon.** The university has highly ranked Ph.D. and professional programs across all fields of study that attract many of the nation's top graduate students every year. Reflecting its global impact, UW–Madison hosts the ninth largest population of international students in the country. The university also has more specialized centers of excellence—across regions and topical areas—than any of its peers. These include the sixteen regional and topical programs (seven of which are federally supported National Resource Centers) linked within UW–Madison's highly acclaimed International Institute, as well as the Nelson Institute for Environmental Studies, the Center for International Business Education and Research, the Institute for Research in the Humanities, the Center for Global Health, and many others. With more collaboration, these centers are the tools for making a valuable global impact.

The global societal challenges of the twenty-first century require a more nimble, interdisciplinary, and innovative university. They require innovative institutions and new incentives. Most of all, they require strong vision and leadership from the campus community.

This report is our effort to outline how we might reform our great university to not only preserve what we do so well, but also adjust for the challenges and opportunities of our time.

IV. OUR VISION: ORGANIZE UW–MADISON AROUND EMERGING GLOBAL CHALLENGES

Our task is to look at the world and see it whole.

—E.F. Schumacher, *A Guide for the Perplexed*

Human activities in the twenty-first century are changing our world at unprecedented rates, and on unprecedented scales. We often find it difficult to keep up.

In the early phases of our deliberations, we asked our team, "What are some of the greatest challenges to the world?" Also, during the early stages of the reaccreditation exercise, our leadership team conducted extensive polling and listening sessions across the campus, asking where we should be focusing our attention as a university.

We pulled together an extensive list of global "grand societal challenges" that concerned our students, staff, and faculty. Here is a small sample from that list:

- environmental sustainability
- critical shortages of resources (e.g., water, energy)
- managing the global commons (i.e., biodiversity, the global atmosphere)
- urbanization and population growth
- global poverty, development
- threats to global public health; emerging diseases, risks of bioterror, environmental health
- human rights: gender questions, rights of women, role of culture / religion
- inequality: equity and inequity dynamics
- global security; peace and security
- management and access of information
- changing role of intellectual property
- changes in governance
- interpersonal fragmentation
- emerging social networks
- changing nature of governments, NGOs, multinational corporations (MNCs), open source communities, social networks
- balancing individual freedoms versus collective responses
- living in an "age of extremes" (income, military power, resources)
- polarization; religious conflict
- changing concepts of citizenship /membership to civil society?
- conflict and role of cultural filters: polarization
- systems of meaning
- interpersonal fragmentation
- questions of ethics: what guides the use of technology, markets, power?
- maintaining social and cultural identity/support structures

This is a daunting list. But when considering it further, we observed that the topics could be roughly organized into four major themes:

- sustaining the human-environment system
- improving the human condition
- reimagining governance
- using ethics and meaning to guide the future

These themes are not all-inclusive, but they capture most of the specific research topics suggested in discussions. They also embody the broadest, most exciting, and most relevant

areas where the university can act as a global agenda-setter for the twenty-first century. These themes are ambitious and practical, scholarly and policy-relevant. They bring the university to the globe, and the globe to the university.

A. *Theme 1: Sustaining the Human-Environment System*

We are at a unique point in history—a time when different disciplines are coming together to forge an entirely new understanding of the planet. This comes not a moment too soon. As we learn more about the changing nature of the global environment, we find that the conditions of our ecosystems and natural resources—including the air, water, land, and biological diversity we depend on—are deteriorating rapidly. It has become especially clear that understanding these global environmental changes requires attention to the interconnections among social and ecological systems across scales, from the village to the globe.

Numerous events, including famines in Africa, the tsunami in the Indian Ocean, outbreaks of SARS and avian influenza, rapid climatic changes in the Arctic, and catastrophic landslides across deforested slopes in China, Haiti and Latin America have demonstrated that social and environmental systems are both tightly interwoven and vulnerable to a range of forces—from globalization to climate change and the loss of biological diversity. There is a pressing need for new approaches that can analyze coupled human-natural systems and contribute to their sustainability. Accomplishing this will require new knowledge that integrates the natural and human sciences, at multiple scales, and engages new ways of understanding and intervening.

At the University of Wisconsin–Madison, we have a rare opportunity to transcend disciplinary divides to make a more meaningful impact on global environmental issues. As an initial step, the university has pursued some limited experiments in cross-disciplinary institution-building in this critical area. For example, in 2000, the UW–Madison established the Center for Sustainability and the Global Environment (SAGE), administered by the Nelson Institute for Environmental Studies, a center of excellence for research on global environmental change. Subsequently, the university funded novel, interdisciplinary faculty clusters in International Environmental Affairs and Global Security, and Energy Source and Policy. While this is a great beginning, we need to expand upon this commitment and transform the institutional infrastructure of the university to meet four challenges: fill critical gaps left by disciplinary inquiry, integrate natural and human science research, foster global and international education, and link research to civic action and public policy.

B. *Theme 2: Improving the Human Condition*

Already, many of the world's people face immediate, life-or-death threats from disease, water scarcity, food shortages, environmental pollution, conflict, and violence. In addition, there are tremendous global challenges posed by a lack of access to education and information as well as the challenges posed by migration/immigration and urbanization. Additional concerns about international equity and justice increase dissatisfaction with the current distribution of power. Given these pressures—combined with increasing concerns over terrorism, globalization, and human rights—we must improve our understanding of the underlying drivers of human health, security, and conflict.

The world faces tremendous challenges to human well-being, whether in terms of public health, international peace, security, education, or prosperity. Numerous international leaders, military planners, and scholars have suggested that we will soon see an era when wars are fought not only over ideology but also over dwindling natural resources. Past historical experience has shown how conflicts over access to natural resources—such as oil, fisheries and fresh water—have exacerbated international tensions and given rise to violence, terrorism, and war. While many of these conflicts are rooted in inequities resulting from past colonialism and imperialism, international resource conflicts will become even more complex as the world struggles with the state of global resources such as the atmosphere, marine fisheries, and the genetic resources of tropical forests.

Instead of addressing particular problems of resource scarcity or intrastate conflict in separation, we believe that cutting-edge work in each of these areas needs greater integration. Scholars of ethnic conflict must engage in deeper dialogues with experts on poverty. Scholars of education must work with experts on media, information systems, and communications technology. Scholars of history, literature, and the arts must connect with experts on urban planning as well as experts on migration and immigration. Scholars of public health must collaborate more closely with experts on governance and security. Improving the human condition—and ensuring progress toward an era of human flourishing—requires an integrated global vision of human societies. This vision can come only when groups of researchers think beyond political labels and disciplinary boundaries.

C. *Theme 3: Reimagining Governance*

Presumptions about the standard geography and institutions of governance no longer capture the complexity of contemporary experiences. For the purposes of nurturing new research with long-term global impact, the university should nurture three interrelated approaches to the study of governance. All three involve collaborative interdisciplinary international research.

First, new studies of governance must cross traditional state boundaries and interrogate assumptions about state sovereignty. Research on politics and society is largely organized around state boundaries. Many of the pressing challenges of our contemporary world—environmental degradation, terrorist violence, and economic inequality—transcend these boundaries. State institutions often lack the resources, the authority, and the insight to address challenges of this scope. In place of territorial-bounded states, transnational bodies—including the European Union, the United Nations, the World Trade Organization, and other diverse entities—are emerging as important governing institutions. We envision researchers at the UW–Madison contributing to an emerging discussion of these developments and more innovative ideas about new forms of transnational governance and problem-solving.

Second, emerging forms of global governance will alter definitions of citizenship. Loyalties, forms of accountability, and basic social habits will change as people look to new figures and institutions for leadership. This is the social and cultural side of globalization that often gets neglected. By bringing together scholars of global change with experts on domestic society, the UW–Madison is poised to become a pioneer in both understanding and reformulating

citizenship for the twenty-first century. This work has direct relevance not only for daily behavior, but also for the management of resources and spaces in the global commons, where cultures of individual cooperation and duty are as important as enforced rules and regulations.

Third, reforms and research in global governance are encouraging new forms of experimentation. Theoretical work points to new designs for building authority and legitimacy. Policy work focuses on implementation of various designs and their consequences. Governance as practice, in various professional settings, emphasizes experimentation, adaptability, and innovative leadership. Making the university more effective in contributing to a global agenda will require a more determined integration of research in theory, policy, and practice.

D. *Theme 4: Using Ethics and Meaning to Guide the Future*

A strong, self-conscious commitment to *values* must underpin the newest and most important work in universities. These values will grow from conversation between technical and humanistic thinkers at all stages of the research process—conceptualization, analysis, publication, and application. An emphasis on values will seek to assure a deep connection between the global and the local, including attention to diversity.

Ethical issues have recently arisen in many different global arenas such as corporate ethics, bioethics, military ethics, and political ethics. Furthermore, ethical considerations frame the other themes outlined in this report: fairness in the global distribution of resources, balancing the economic benefits and ecological effects of industrial development, fostering inclusive but also efficient forms of international governance, respecting cultural and religious traditions while promoting basic human rights, among others.

Some of the most compelling recent work in the humanities and social sciences—especially in fields such as history, philosophy, anthropology, sociology, comparative religion, and comparative literature—concerns the ways in which different values and frameworks of meaning affect different groups' perceptions of shared circumstances and their willingness to deliberate together about their shared fate. Understanding these differences is crucial to formulating workable solutions for enduring problems. We must ask: what good is sophisticated technology if people around the world cannot agree on the underlying ethical values that should guide its wise and sustainable use?

The University of Wisconsin–Madison is fortunate to have several of the world's top-ranked departments in the humanities and social sciences, as well as the first and now renowned centers for area studies—just the resources needed to infuse our work with crucial discussions of ethics and meaning. An emphasis on values will deepen the applied dimensions of our research, ensure that our work advances ideals of justice and equity, strengthen our sensitivity to social and cultural identities, and keep the importance of serving *the greatest public good* foremost in everything we do. Without a focus on values as the glue that holds the multiple dimensions of the university's work together, we cannot achieve the global impact we seek. With clear-eyed attention to values and meanings in our research we have an opportunity to make our work serve a broader and more enduring public audience.

V. INSTITUTIONAL TRANSFORMATION AT THE UNIVERSITY OF WISCONSIN–MADISON

Our university is filled with pioneering scholars in very diverse disciplines. Although these scholars consistently produce groundbreaking research, their work is frequently completed in near isolation from the work of colleagues in other disciplines. Similarly, researchers on campus often operate with little connection to the policy institutions, businesses, and other groups outside the academy that have nonacademic uses for their knowledge. Specialization—within disciplines and between the university and other parts of our society— has limited the global reach of our research on campus.

At this juncture, reinvigorating the Wisconsin Idea requires new institutional incentives for both interdisciplinarity and real-world problem solving. We need to nurture careers that mix specialization and generalization, academic rigor and pragmatic application. We also need to make contributions to global human flourishing, not just in our discipline-centered metrics, but as a long-term goal for ourselves, our students, and our institution as a whole.

The global themes we identified above are not all-inclusive, but they capture some of the broadest, most exciting, and most relevant roles the university can play as a global agenda-setter for the twenty-first century. Our institution, in particular, has a great opportunity to reinvigorate the Wisconsin Idea for a globalized world. To do this, however, will require a frank recognition of the challenges rooted in standard modes of behavior. To meet our potential in a challenging world we must not be content simply to continue business as usual.

A. *Interdisciplinary, Real-World Problem-Solving*

We need to advance new discovery and learning to address these issues. As indicated above, many of the most interesting and relevant research questions are not confined within traditional departments and programs. Environmental sustainability, an improved human condition, global governance, and ethics and meaning require significant cross-disciplinary work with strong institutional backing.

These efforts must include more than ad hoc collaborative arrangements. Our university needs a regularized integration of expertise, mind-set, and vision across areas of scholarly inquiry. Integrated research will cross not only disciplines, but also scales of inquiry—from local to national to global. Integrative research of this kind, and its public applications, should receive more attention from the UW–Madison administration, the University of Wisconsin Foundation, and WARF.

We need to engage in real-world problem-solving. Integrated research across departments and disciplines will allow for more effective problem-solving, while also preserving academic integrity. By organizing research to address shared problems and themes, scholars will have more freedom for innovation and more connection to real-world applications. The university should nurture research to follow interesting lines of inquiry, not inherited institutional divisions. This approach will produce not only more relevant work, but also more daily

interaction with outside partners and stakeholders who have insights and resources to offer. The Wisconsin Idea for the twenty-first century will emphasize innovation and problem-solving, across and beyond traditional disciplinary domains.

B. *Making Universities More Nimble, But Still Robust*

The hiring, promotion, and funding bases for university activity insulate the institution from many short-term market pressures, allowing for long-term research perspectives. This is a great strength. It is also a weakness. Universities can be rigid and slow to react to pressing challenges and opportunities. We need to design a university structure that remains insulated from immediate market swings, but also encourages nimble, robust responses. The university should not seek to exert immediate influence on society, but rather than settling for innovation on a forty-year career scale, we must learn to adjust to global challenges on a five- to ten-year scale. The world's problems emerge quickly, often with little (apparent) warning. The university must be ready to meet new problems before it is too late.

C. *What Is the Right Structure for Wisconsin?*

We need real structural change to pull this off. The above challenges require much more than band-aids on existing university institutions. We do many things well, but there are many more things we need to do. This will require real change in key institutions—colleges, departments, promotion committees, and funding streams. We need to take a long hard look at our institutions and ask which ones serve our needs, which ones do not. We should preserve department privileges when they serve research and teaching purposes, and look for better ways to integrate their work among units.

We need to avoid the "garbage can" model. The tendency of the university, like all large organizations, is to match existing institutions to problems they were not designed to serve. What scholars of organizations call the "garbage can" model (Cohen et al., 1972)[1] of connecting incompatible purposes and solutions avoids short-term conflict, but it often stifles long-term effectiveness. The tendency to avoid fresh thinking and rely on old habits undermines our efforts. We need to stop deploying the wrong tools simply because those are the only tools readily available. Instead, the university needs to strengthen institutions that continue to serve important purposes, redesign institutions that are not fully appropriate for needs, and discard institutions that no longer meet our priorities. We also need to act creatively and build new institutions for contemporary challenges and opportunities. Instead of the garbage can we need a burst of institutional innovation. The university of the twenty-first century will not look the same as the university of the past.

VI. RECOMMENDATION 1: INVESTMENTS IN INTELLECTUAL CAPITAL

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[1] Cohen, Michael D., James G. March, Johan P. Olsen. "A Garbage Can Model of Organizational Choice*," Administrative Science Quarterly*, Vol. 17, No. 1. (March 1972), pp. 1-25.[

The key to continuing and renewing the UW–Madison's greatness as a global actor is to increase investments in intellectual capital. Recent budget difficulties have proven most harmful in this area, limiting some of the basic resources for retention and development of faculty, academic staff, and graduate students. We do not expect a major infusion of state resources in the near future. We believe, however, that the university can take a series of steps to make more effective use of existing resources and increase nonstate funding. The university can realistically do more to give faculty, academic staff, and graduate students additional opportunities for innovative global research.

A.   *Increasing Strategic Investments by the UW–Madison*

Investments in intellectual capital require clear priorities and strategic decision-making.

Our university does not have the resources to do everything. Many of the successful investments in intellectual capital from prior years are not entirely appropriate for the global agenda of the university in the twenty-first century. In particular, we believe the university needs to give more attention to investments in activities that encourage broader interdisciplinary collaboration, deeper partnerships between academic researchers and outside stakeholders, and more extensive intellectual risk-taking.

But innovative global research is risky. The complexity and the diverse partners for this research mean that many promising projects will fail. The university needs to recognize this and encourage an acceptance of it. Faculty, academic staff, and graduate students should receive more material and cultural support for taking intellectual risks that promise big global payoffs. The university should provide consistent targeted investments of time and money for the conceptualization of bold projects, the training required to carry them through, and the work that can bring them to fruition.

We must have the courage to aim high.

B.   *Revisit Allocation of Annual Graduate School /WARF Gift Funds*

Aiming high requires more strategic allocations of our internal research resources within the university.

At Wisconsin, we are extremely fortunate to have an annual gift from the Wisconsin Alumni Research Foundation (WARF) to the campus, managed through the Graduate School. This annual gift is currently targeted to supporting graduate fellowships and small annual research awards to faculty and staff.

Here we propose a strategic model for reallocating a portion of these funds.

First, we propose to shift part of the funding used to support graduate fellowships on campus. The current allocation of graduate fellowships by the Graduate School focuses mainly on *individual* students (not on groups or cohorts) across the campus, judged mainly by their *individual* GRE scores, GPAs and letters of recommendation. These fellowships are

distributed across departments and programs, largely reflecting the quality of student applicants, but also with a view of "sharing the wealth" across our many graduate programs. This is a fine model, and it supports many outstanding students at the university. But is there another way to support outstanding students, with a more strategic focus on emerging research themes?

Here we suggest a graduate fellowship allocation model, where some of the fellowships are set aside to support *integrative graduate training programs*. These fellowships would be awarded to interdisciplinary faculty teams, coming from at least two departments, to establish graduate training programs in emerging areas of scholarship. We envision that these graduate training grants would support a small number of students (three to six) per year, for several years, in new cross-disciplinary fields, perhaps starting with themes identified in this report.

These new integrative graduate training programs would blend some aspects of our highly successful Cluster Hiring Initiative and the Integrative Graduate Education, Research and Teaching (IGERT) program of the National Science Foundation. By enhancing the cross-disciplinary opportunities on this campus, this investment of fellowship dollars would pay the double dividend of supporting outstanding graduate students *and* investing in new, strategic areas of interdisciplinary scholarship in emerging fields. This shift in resources does not remove support for anyone on campus; rather it provides some incentives (and strategic direction) for more cross-disciplinary collaboration in our graduate education and research.

Second, we propose to shift some of the Graduate School/WARF funds used each year to support faculty and staff research. The current model for funding allocation is very supportive of individual research projects, especially among junior faculty, and is a critically important source of support. This is the most practical place to begin investing in research themes, global priorities, and risk-taking.

While the traditional model of funding has largely focused on *individual research awards*, the Graduate School has recently expressed an interest in receiving multi-investigator proposals, especially in interdisciplinary areas. To encourage this further, especially for projects in high-priority, strategic areas of research, we propose that the Graduate School *explicitly allocate a fraction of its annual research funding (~20–25 percent) to collaborative projects in emerging, cross-disciplinary areas*. Furthermore, we propose that the Graduate School create a joint subcommittee of the existing research committees, explicitly charged with promoting and reviewing cross-disciplinary research activities.

This modest reallocation of the annual Graduate School/WARF research funding should flow to collaborative work with a high potential for global impact, largely by seeding innovative partnerships across different parts of the campus. The product of an annual grant could be an innovative partnership for global impact, as much as a research paper or a book chapter. We believe these annual research investments should target broad global impact in traditional and nontraditional forms.

We would like to see cross-disciplinary research themes—particularly those connected to global challenges identified in this report or those connected to highly successful cluster hire

initiatives—articulated as part of the Graduate School's annual competition. These themes should be explicitly interdisciplinary, covering the entire campus and designed for broad and deep global impact. And these themes should change over time.

We believe the Graduate School should use these global themes to guide its strategic investments of resources. Faculty, academic staff, and graduate students should be encouraged to connect their research with the articulated themes, and they should receive research funding and other support for doing so.

In our model, the Graduate School would continue to allocate the majority of the WARF gift funds to individual graduate fellows, faculty and staff, but it would also make the support of integrative research and training themes a priority. Done properly, this would not come at the expense of anyone on campus. Instead, it would encourage a more integrative, global vision for the campus, inspire its constituents to work toward this vision, and contribute to real-world impact.

We also believe that this renewed Graduate School research vision would help to encourage the WARF, outside stakeholders, and others to increase their resource allocations to the campus as a whole for intellectual development. By targeting these internal resources we can also expand resources for everyone.

VII.   RECOMMENDATION 2: INVESTMENTS IN HUMAN CAPITAL

In an era of constant change, when the world's "problem times" are significantly shorter than university "career times," it is important to have ways to regularly renew our faculty and staff. Traditional models of career stewardship—hiring someone into a discipline that remains nearly constant for thirty years—are no longer able to respond to our rapidly changing world. We need to find *ways to renew our human capital*—especially faculty and staff in whom we are making career-long investments—to better match the global pace of change.

Furthermore, we must consider ways to enhance more innovation and collaboration within the university, so that we can employ our intellectual capital in new, creative ways. Rather than staying within the "mineshafts" of knowledge for an entire career, we must find ways to encourage more cross-disciplinary, and especially more externally engaged, scholarship on campus—using our *existing* human capital. To encourage cross-disciplinary work, we must eliminate institutional biases against it in promotion and funding committees and build incentives for it in the culture of daily behavior at the university.

This university is far ahead of many others in terms of the encouragement it gives to faculty and staff to work across disciplinary and departmental lines, through initiatives such as the cluster hires, campuswide collaboratives, and through our many research circles, programs and centers. But the focus of assessment, promotion, and reward remains largely departmental and disciplinary—even where faculty members hold joint appointments. To further enhance our interdisciplinary work, the university will need to strengthen the mechanisms for evaluating and rewarding those activities, by ensuring that all of the units for which faculty

members work are fully involved in the annual merit assessment and other career milestones (e.g., promotion, post-tenure review, nominations for chairs), rather than leaving the main responsibility to individual departments alone.

These are significant challenges to all U.S. universities, and it will take tremendous effort to find solutions to all these issues. Below, we make several specific recommendations to help the University of WisconsinMadison *renew* our human resources.

A. *"Internal Sabbatical" Program*

One relatively easy program to implement would be an institution-wide "internal sabbatical" system. This system would encourage faculty and academic staff to take sabbaticals *on campus* in groups, focusing on new, cutting-edge, collaborative areas of work.

The current sabbatical system is extremely helpful, and provides an opportunity for our faculty to "recharge their batteries" (but often at another institution) or truly focus on finishing a major scholarly project (e.g., a book or manuscript). However, these sabbaticals do not:

- enhance collaborations on the UW–Madison campus (instead, we encourage collaborations at other institutions, but not our own);

- provide opportunities for group projects, including the groundwork needed to jump-start new research ventures, new curricula, or new outreach activities;

- reflect the modern reality of dual-career families, where the traditional sabbatical arrangement (where the whole family could often drop everything to follow the faculty member to another city) is often unworkable.

Our "internal sabbatical" idea would encourage small *groups of faculty* from across the campus (from at least two different units) to take sabbaticals together, in Madison, where they would work to enhance cross-disciplinary scholarship and, in many cases, launch a major, new UW-based project.

This proposal would <u>not</u> replace traditional sabbaticals, but rather provide an option for more collaborative, institution-enriching activities.

Some hypothetical examples of group sabbaticals include:

- A team of faculty from engineering, biochemistry, bacteriology, environmental studies, and policy studies work on a major synthesis of the pros and cons of new biofuel technologies, developing a series of new research articles, white papers for government and industry leaders, and public-policy briefings.

- A group of faculty and academic staff from a variety of disciplines develop a new approach to forming university partnerships with industry, NGOs and governments in the state of Wisconsin, amplifying the Wisconsin Idea.

- A group of faculty and academic staff from the humanities, social sciences, biological sciences, and engineering collaborate to write a major report on how the basic definition of international security has changed in the twenty-first century, and how government leaders and organizations should respond.

- A team of faculty from the social sciences (e.g., history, sociology, education, anthropology, political science, economics, and global health) craft a report to assess barriers to children's welfare and economic opportunity around the world.

To make the internal sabbatical system effective, the university must provide some central space for sabbatical faculty and academic staff, so that they may work on (or near) campus, but away from their regular offices. Furthermore, basic administrative and IT support would be provided to each team.

Ideally, these internal sabbatical spaces would be highly integrated into an emerging "eCampus" infrastructure, as suggested by Team 4. We are very excited by the synergies between their ideas in this area and our own.

Faculty teams would apply, as a group, for this innovative program. The proposals should show potential for *creativity, truly collaborative activities, long-term institutional benefits, and a commitment to engaging in outreach and other real world outcomes*. Following the sabbatical year, the groups would be required to document their activities, and provide an assessment of the key outcomes of their work together. They would also be asked to outline how their collaboration will continue in the years after the group sabbatical.

In the early stages of the program, the internal sabbatical program may choose to focus on targeted, innovative research themes—perhaps leveraging investments made in the cluster-hiring program.

This program would require a significant investment from the university, but we believe that it could be adapted largely from the existing sabbatical system, and be financially viable.

B. <u>Advanced Leadership Training</u>

Another critical element of renewing our human resources is to provide advanced leadership training opportunities to our faculty and staff. Such a program would allow for professional renewal opportunities, and the ability to extend our faculty and staff to engage in new kinds of partnerships.

The need for new leadership and communication skills is pressing.

Basic research, by itself, is no longer enough to meet the growing needs of a rapidly changing society. We are entering a new age of human history, where traditional views of science, technology, economics, culture, and policy may no longer be appropriate. In particular, the scholarly community must find ways of blending basic research with practical outcomes. This is best achieved through innovative partnerships with nonacademic partners.

Furthermore, university scholars must provide more effective leadership in these complex times. We must work to communicate new ideas directly across numerous boundaries, so that they are clearly presented to policy makers, business leaders, and the general public. We must work to negotiate solutions to complex problems.

As a result, many faculty and staff, especially those in midcareer and senior positions, would greatly benefit from advanced leadership training, helping them to extend their work beyond the university and connect to partners in government, industry, NGOs, the media, and civil society.

One particularly effective model for this is the Aldo Leopold Leadership Program, run out of Stanford University with support from the Packard Foundation and the Ecological Society of America, which focuses on midcareer faculty from the environmental sciences. This program involves two major, week-long units: one focuses on leadership, communication skills and media relations; the second, held in Washington, D.C., focuses on building partnerships across government, industry, and NGOs. This is a truly intensive course, led by some of the best media- and government-relations people in the country.

Such a program could also be extended to professional, graduate, and undergraduate students. However, it would be most useful to tailor these programs for particular programs—whether in Ph.D. research programs, professional programs in business, law or medicine, engineering, or undergraduate liberal arts programs. Ideally, each school and college at UW–Madison would work to incorporate elements of these leadership programs into its existing framework.

VIII.   RECOMMENDATION 3: WISCONSIN ALLIANCE FOR GLOBAL SOLUTIONS (WAGS)

As discussed above, the greatest challenges facing the world today are complex and multifaceted. To address them successfully, we must understand their causes and consequences clearly, and we must confront them directly.

As repositories of knowledge and agents of discovery and innovation, universities can lead the way toward global solutions. Yet when persistent problems evolve and new ones emerge, our traditional funding sources—government and private foundations—are often slow to react, and much valuable time is lost. Even when funding is timely, we often lack the internal mechanisms for translating the fruits of research—good ideas—into action. As a result, we need a new institutional structure for mobilizing and publicizing our most innovative and exciting global research.

Here we propose the creation of the *Wisconsin Alliance for Global Solutions (WAGS)*—a hub of interdisciplinary innovation focused on developing solutions to the pressing global problems of our century. WAGS will focus on the twin missions of supporting interdisciplinary scholarship and real-world problem-solving. The Alliance will nurture research, teaching, and broader societal engagement, building on a broad mix of specialization and generalization, academic rigor and pragmatic application.

WAGS will become a focal point on the campus for finding the solutions to global emerging challenges, initially concentrating on the four themes identified above: sustaining the human-environment system, improving the human condition, reimagining governance, and using ethics and meaning to guide the future.

These themes will serve as initial rallying points within WAGS, drawing together expertise from the humanities, social sciences, natural sciences, professional schools, and beyond. Over time, these themes will change and evolve, so that the Alliance avoids the trap of becoming a single-issue think tank. An advisory board of faculty, staff, distinguished alumni, and members of the public will be charged to "re-make" the themes for WAGS every five years.

A. *What Will WAGS Do for the University of Wisconsin–Madison?*

1. WAGS will make the UW–Madison the world's "go-to place" for solutions to our most challenging global problems, such as:

- finding solutions for sustainable bioenergy, to improve our energy, environmental, and food security;

- offering a new development agenda for problems of terrorism and impoverishment in "failed states";

- advancing strategies to improve Wisconsin's—and the United States'—competitiveness in the "global knowledge economy."

2. WAGS will make the UW–Madison the key, trusted "matchmaker" for innovative partnerships to solve specific global problems, including:

- working group of governments, NGOs and MNCs to promote democratization and good governance;

- consortium to create "open source" biotechnology to combat malaria, HIV in developing countries;

- team of scholars, policy makers, and business leaders to model connections between migration/immigration, urbanization, and economic development.

3. Finally, WAGS will make Wisconsin an incubator for energy, engagement and creativity among students to change the world. WAGS will unleash a generation of new, creative problem-solvers into the world.

WAGS will be a new network on campus *explicitly committed to the development of global solutions, stemming from the intersection of basic and applied research, innovative teaching and learning models, worldwide outreach and communication, and broader societal engagement across all disciplines.* The purpose of this Alliance will be to nurture the kinds of cooperation among scholars and outside stakeholders that would not occur otherwise. The network will aim to catalyze long-term partnerships across the various units on campus and beyond.

It is important to note that WAGS is only a *part* of our overarching proposal to focus the university on pressing global challenges. WAGS is a focal mechanism for building global research efforts around guiding themes, and is interdependent with the other reforms proposed above.

Our team does not seek to redesign the university. Nor do we envision eroding the fundamental mission of creating new knowledge. We are suspicious of grand, all-encompassing plans for change. Instead, we propose to create a dynamic, new institutional anchor on campus that will begin to move the institution in an exciting new direction. We hope to catalyze exciting interdisciplinary research and "real-world" applications by transforming the experience of faculty deliberately and consistently, with effects that we hope will ripple through the campus as a whole.

If successful, WAGS will make the UW–Madison the real-world *the* place for finding and sharing new global solutions in the twenty-first century. The innovations emerging from WAGS will draw attention and application around the globe. They will also inspire more work of the same kind around campus. Most significantly, WAGS will not become a single-issue think tank, but continually remake itself to encompass new research and address new problems. This, after all, is the deepest mission of a great university.

B. *How Will WAGS Be Structured?*

WAGS will not be a traditional institute or center. It should not become a new bureaucracy.

Instead, WAGS will be an umbrella network to help integrate the existing loci of excellence and innovation across campus (figure 1). It will draw upon informal faculty groups, existing programs and centers, and the array of schools and colleges across the campus.
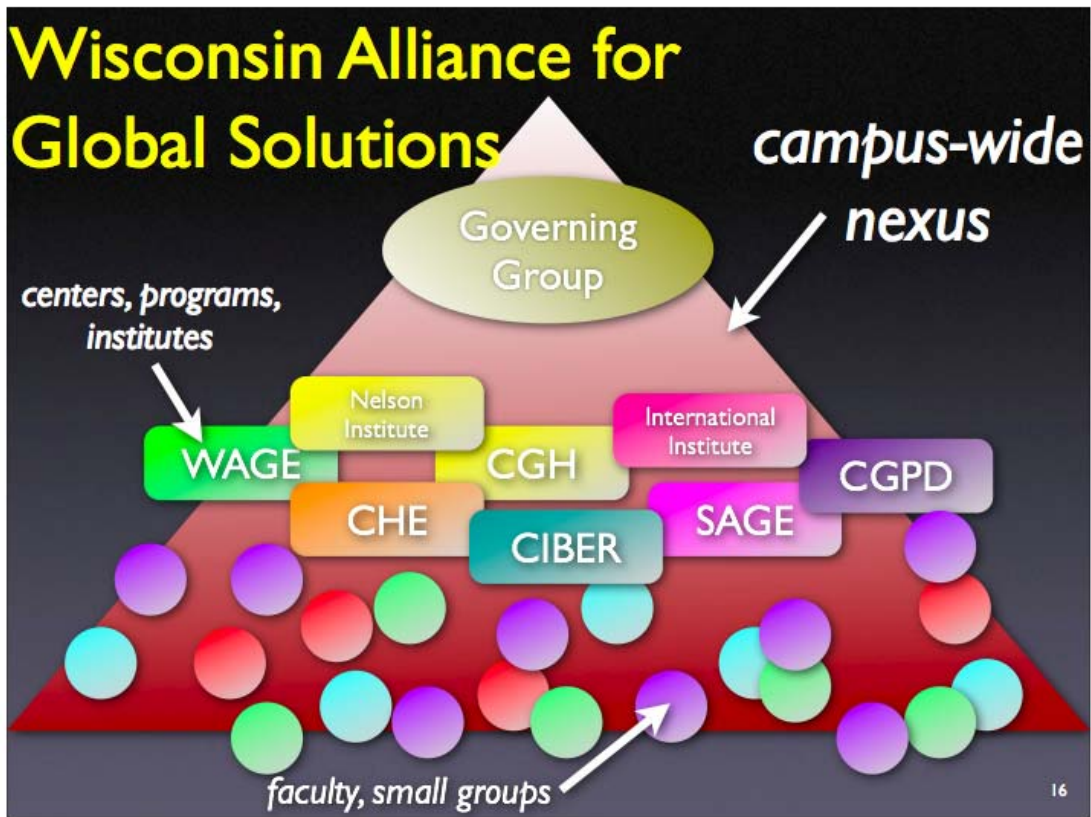
Figure 1. Structure of WAGS. WAGS provides a flexible structure for organizing small groups, programs, and centers across the university—providing an umbrella for doing and supporting innovative work on pressing global problems. We imagine that WAGS will build upon the excellent research activities, programs, and centers found across the many schools, institutes and colleges at the UW–Madison, and provide a more unifying voice and outlet for these activities.

WAGS will also work closely with the existing centers and divisions of the university. It will not govern the various faculty groups, programs, centers, departments, or schools and colleges. Instead, it will help to coordinate, integrate, and catalyze their work for maximum global impact. Above all, WAGS will nurture vibrant horizontal lines of communication between innovative groups—breaking down the institutional walls that create silos in a still largely vertical university structure. WAGS will make the university a more creative, but still a grassroots, intellectual matrix.

Do We Need WAGS?

Before embarking on any new structural investment, the university should carefully ask whether such a structure is necessary.

We have considered alternative models for WAGS, including the possibility that such an activity could be led by an existing campus unit, including our standing schools and colleges, or an interdisciplinary unit such as the Nelson Institute for Environmental Studies, the International Institute, the La Follette School for Public Affairs, the Graduate School, or the new Wisconsin Institutes for Discovery.

Each of these existing units has tremendous strengths, and a few come close to some (but not all) the core missions of WAGS. Unfortunately, we determined that **no existing unit conducts the scope and breadth of work that WAGS envisions**—flexibly bringing together the "best and the brightest" from across the entire campus to advance cutting-edge, solutions-based research, teaching, communications and outreach, and societal engagement on the most vital, cross-disciplinary problems challenging the globe today. While many existing units have exceptional capacity in world-class research and development, interdisciplinary scholarship, building international collaborations, external communications, or facilitating broader societal engagement and outreach, no single unit has all these qualities in a single place, in the proportions envisioned by WAGS.

Furthermore, all the existing units have a strong, but naturally limited (often by definition) constituencies. None links activities across the *entire* campus.

Rather than wedging the mission of WAGS into an existing unit and declaring success—something that often happens within universities—we feel strongly that these global challenges deserve the full-time attention of a new, innovative campus structure, purposefully designed for this goal.

These challenges are too important to leave to a less-than-optimal structural solution.

The administration of WAGS will remain small, flexible, and nonintrusive. The director of WAGS will be a faculty member with a strong commitment to interdisciplinary global research. He or she will chair the WAGS advisory committee, composed of the director and twelve others drawn from the faculty, academic staff, distinguished alumni, and the public at large. All members of the advisory committee will have proven records of activity with innovative global impact. All members will also have personal familiarity with university research and with nonuniversity activities in business, government, nongovernmental organizations, public advocacy, or public policy.

The advisory committee will help to articulate the research themes to focus WAGS efforts. The assumption is that themes will change frequently, probably on a staggered three- to five-year cycle. The research themes will provide the director with an agenda around which to mobilize faculty, centers, and nonuniversity constituencies. The research themes will also form an agenda for fund-raising from foundations, federal and international agencies, and private donors.

The director will work closely with the chancellor, WARF, and the University of Wisconsin Foundation to align fund-raising with the exciting initiatives nurtured by WAGS. The director of WAGS should, accordingly, have a title equivalent to dean or vice chancellor.

To be successful, WAGS will need critical investments of space, operating budget, seed funding, access to major donors, and other resources.

WAGS will need enough space for offices (for staff and fellows), public events, seminars, and collaborative research work. There are many possible configurations of this space—either in a *single, integrative space* or a *distributed, interconnected space*. Building on the proposals from Team 4, we envision the possibility of a highly distributed set of spaces, connected through new, collaborative technological solutions, as part of a CISCO-based, "eCAMPUS" initiative. We therefore propose that WAGS be allocated sufficient space in several locations across the campus, with an appropriate budget for remodeling and high-tech teleconferencing capabilities. While this represents a significant campus investment, it is far less than the cost (in capital, operating and debt-servicing dollars) of new construction, and it is ultimately far more flexible.

A distributed, high-tech, space solution for WAGS has many advantages. First, it is more likely to engender day-to-day participation of our faculty members, staff and students, compared to a single space on campus—typically far removed from the primary offices of likely WAGS participants. Second, it is much more cost-effective and space efficient than building a new space, and utilizes existing locations on campus far better. Finally, the appropriate eCAMPUS technology solutions have the advantage of increasing our ability to communicate with other institutions—from academic, government, business, and nonprofit sectors—across the region, the nation, and the world. As an organization that is thinking of twenty-first-century solutions, what better space solution is there than a decentralized, highly wired one?

To function properly, WAGS will also need critical investments of funding—both in terms of core operating costs and seed funding for new initiatives. We anticipate a small initial budget of $1 million, drawn from various funding sources around campus. Building on its promise and early work, we expect that WAGS can attract significant capital from outside sources for a much larger annual operating budget. We expect that WAGS will work closely with the chancellor's office, WARF, the UW Foundation, and the state government to initiate a major fund-raising campaign, with extensive publicity. The campaign will aim at charitable foundations, private donors, and federal government sources. Initial discussions with all these constituencies have indicated palpable enthusiasm for this kind of initiative among potential donors.

C. *How Will People Participate in WAGS?*

WAGS needs a capacity to operate at a range of scales, and flexibility to adapt to the needs of particular projects or tasks. As such, WAGS will be organized in the broadest and most

flexible way possible—allowing for multiple modes of participation. Initially, WAGS will support a wide array of activities, including:

- short-term (one to two years) faculty and staff projects, in collaboration with outside partners, coordinated with "internal sabbaticals" proposals, described above;

- medium-term projects (three to five years) that can be accomplished by a small group of faculty, staff, and outside partners co-located on campus for a limited period—a sort of temporary center;

- long-term projects (six to seven years) that may require greater investments of time and resources—a semi-permanent, center-like activity, but with clear "sunset clause" provisions.

In addition, WAGS should have a capacity to act in other modes according to the needs of the task or project. Some projects might be served by co-location (possibly off campus) in summer for intensive collaborative work, with faculty returning to their normal duties and loci in the academic year. Other projects might need "intellectual venture investments," principally in the form of faculty and staff time, to develop major proposals to outside funders.

We envision that WAGS will have a number of resident "Fellows," attached to particular projects and themes, drawn from the university and outside partners in industry, government, academia, and civil society. It is especially important for the mission of WAGS that nonacademic partners are well represented. While WAGS Fellows are a critical part of the Alliance, we will also maintain the capacity for flexible, less-expensive innovative activities that do not fit the "Fellow" structure but are nonetheless important. We envision that a selected group of scholars and outside partners will rotate through the center every one to five years, following the models articulated above.

It is very important that, at any given time, projects linked to WAGS represent a wide range of disciplinary approaches. WAGS will not succeed if it becomes identified with a single or narrowly configured approach to solving global problems. WAGS must embrace—indeed, reach out to—the full array of expertise represented both on and off campus. The regular rotation of associated projects and Fellows, as well as the rotation of designated "themes," will ensure the constant revitalization of WAGS as its affiliates tackle rapidly changing global challenges. WAGS cannot afford to stagnate, nor can it succeed without broad participation from faculty and staff campuswide over time. Its flexible, evolving structure ensures that it will remain both dynamic and inclusive.

WAGS Fellows will integrate their new interdisciplinary and real-world thinking into their ongoing research and teaching. We expect, however, that participating scholars will receive some significant release from department and university administrative duties. They should also receive a modest research stipend to help finance some of their new research while at the center.

D. *Outcomes from WAGS*

We conceive of WAGS as an important reform in the university with major payoffs. Our goal is not to deal with all challenges at once, but to spark positive ripples with targeted investments. WAGS will be an experiment to inspire new dynamism, catalyze new ideas, and implement new solutions.

We believe that WAGS will deliver the following outcomes:

A "Big Idea" for the University of Wisconsin–Madison in the Twenty-First Century. WAGS can be the "big idea" for the university in the twenty-first century. It will capture what we do best—innovative, interdisciplinary global research—and allow us to do it even better. It will identify us as *the* place for research that is changing the world. It will make the university *the* leading global research institution. We should aim for nothing less.

Tell a Unique, Powerful Story to the World. This is a simple, unique, and compelling story for us to tell outside stakeholders about the university. It allows us to update and reinvigorate the Wisconsin Idea around the time of its one-hundredth anniversary. WAGS will allow the university to set both a substantive research agenda and a positive narrative for how we are improving the state, the nation, and the world.

Rallying Point for Raising New Resources. We are confident that there is a hunger for what WAGS promises among major foundations, corporations, and private donors. In our experience, many of our university's most generous donors are excited by evidence that our university is mobilizing in creative ways for new global challenges. WAGS will inspire our outside stakeholders and attract new outside supporters. We believe that WAGS can serve as a rallying point for an ambitious University of Wisconsin Foundation fund-raising campaign. Other universities have raised very large sums for lesser visions. We can offer more vision and more capability than our counterparts through WAGS, and we can surely attract more nonstate money. We can build the resources to be a true global leader.