



Why Minerva Matters

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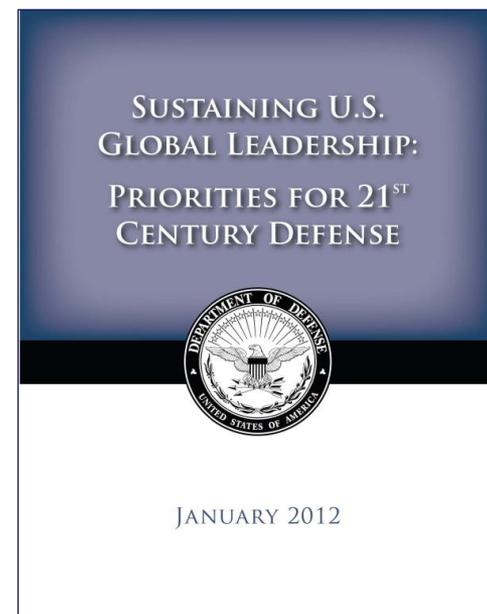


“[In Iraq’s Al Anbar province during Operation Iraqi Freedom] it took a long time... to learn and disseminate basic facts on which we should have built our initial campaign plan—lessons about the ethnic and religious composition of the society in which we were fighting, the role of tribal connections and authority in building effective political structures, the character and composition of the insurgent group Al Qaeda in Iraq... We paid the price of our ignorance in the blood of our sons and daughters.”

– LTC John Nagl (ret.), contributor to Field Manual 3-24, *Counterinsurgency*, and USNA Minerva Chair

Priorities for 21st Century Defense:

- Actively counter irregular threats and violent extremism in the Middle East and South Asia.
- Clarify the strategic intentions of China’s growing military power.
- Build new partnerships with non-traditional allies to ensure regional stability.
- Increase emphasis on non-military means to address instability and reduce the demand for significant U.S. force commitments to stability operations.





What is the Minerva Research Initiative?



- **Goal:** Improve our understanding of social, cultural, and political forces that shape regions of the world of strategic importance to the US.
 - Defense social science basic research uses rigorous methodology to investigate *why* and *how*, versus *who* or *what*, for mission-relevant questions such as the cultural context and motivations for violent extremism and contributors to social stability.
 - Understanding cultural and political environments will lead to better capabilities in assessing radical actors and trends and anticipating the impact of regime disruptions.
- **Initiated by Secretary Gates, now supported by Secretary Panetta**
 - Build cultural and foreign area knowledge and insights to inform more effective strategic and operational policy decisions by war planners and warfighters.
 - Revitalize DoD's connections w/ humanities & soft sciences outside of government



Current Minerva efforts: Minerva Research Fellows at PMEIs



Goals:

- **Build in-house expertise in the social sciences** at the strategic level across the Services and within the Department
- **Enhance connectivity** between civilian university-based social science research community and Defense educational institutions.
- The year ahead: 12 scholars in Minerva research areas at 8 Service and Joint War Colleges and Academies

School	Topic
Army War College	<i>Cross-Domain Deterrence</i>
Air University	<i>Energy and Climate Change</i>
Marine Corps University	<i>Terrorist Orgs & Ideologies</i>
Naval War College	<i>Iraqi Perspectives / Culture and Strategy</i>
NDU (INSS and NWC)	<i>Religious and Cultural Change in Muslim World</i>
US Air Force Academy	<i>Evolving Strategic Relationships with China</i>
US Military Academy at West Point	<i>Social/ Spatial/Cultural Topologies of African Villages; Differences in Islamic Ideologies</i>
US Naval Academy	<i>The Influence of Culture on War</i>



Current Minerva efforts: University-Based Basic Research



- **2008 solicitation funded ongoing FY09 research efforts**
 - **7 multi-university consortia**
\$10M/yr total for 5 years, executed by Services
 - **18 individuals & small groups** for more targeted projects
\$8M over 3 years, executed by NSF in partnership with OSD and coordinated with DoD managed Minerva projects
- **Actively building connections between researchers and**
 - Office of the Secretary of Defense
 - Military Services
 - Combatant Commands
 - USG-wide through intelligence community, State department, USAID
 - International Security Assistance Force, Afghanistan



7 FY09-13 Consortia Efforts



- **Study of Innovation and Technology in China**
Lead: UCSD
- **Mapping the Diffusion and Influence of Counter-Radical Muslim Discourse**
Lead: Arizona State
- **Iraq's Wars with the US from the Iraqi Perspective**
Lead: Monterey Institute of International Studies
- **Terrorism, Governance, and Development**
Lead: Princeton
- **Emotion and Intergroup Relations**
Lead: San Francisco State
- **Climate Change and African Political Stability**
Lead: UT-Austin
- **Explorations in Cyber International Relations**
Lead: MIT



18 FY09-11 Small Team Efforts



<p>Experimental Analysis of Alternative Models of Conflict Bargaining (<i>University of Virginia, University of Mississippi and SUNY – Binghamton</i>)</p>	<p>Cyber Deterrence: Strategy and the Network Society (<i>King’s College London</i>)</p>
<p>Behavioral Insights into National Security Issues (<i>UT-Dallas and University of Virginia</i>)</p>	<p>Fighting and Bargaining over Political Power in Weak States (<i>UC-Berkeley</i>)</p>
<p>Predicting the Nature of Conflict — An Evolutionary Analysis of the Tactical Choice (<i>Virginia Commonwealth University and Virginia Military Institute</i>)</p>	<p>Status, Manipulating Group Threats, and Conflict Within and Between Groups (<i>University of Guelph and Indiana University</i>)</p>
<p>Mapping Genealogies of Terrorist Organizations (<i>Stanford University</i>)</p>	<p>Modeling Dynamic Violence: Integrating Events, Data Analysis, and Computational Modeling (<i>College of William and Mary, UNC-Charlotte, U of Georgia, Southern Illinois U- Carbondale, and BYU</i>)</p>
<p>Strategies of Violence, Tools of Peace, and Changes in War Termination (<i>Columbia University</i>)</p>	<p>How Politics Inside Dictatorships Affects Regime Stability and International Conflict (<i>UCLA and Pennsylvania State University</i>)</p>
<p>Engaging Intensely Adversarial States: The Strategic Limits and Potential of Public Diplomacy in U.S. National Security Policy (<i>University of Southern California</i>)</p>	<p>The Political Economy of Terrorism and Insurgency – Workshop (<i>UC-San Diego</i>)</p>
<p>Avoiding Water Wars: Environmental Security Through River Treaty Institutionalization (<i>University of Georgia</i>)</p>	<p>Substantive Expertise, Strategic Analysis and Behavioral Foundations of Terrorism – Workshop (<i>UT-Dallas</i>)</p>
<p>Cycles of Repression and Dissent in the Context of Migration, Economic Dependencies, & Social Networking (<i>Ohio State University</i>)</p>	<p>People, Power, and Conflict in the Eurasian Migration System (<i>Social Science Research Council, U Arizona, Kennan Institute, U Maryland, Moscow State University</i>)</p>
<p>Modeling Discourse and Social Dynamics in Authoritarian Regimes (<i>Cornell University, University of Memphis, and UT-Austin</i>)</p>	



Minerva Insights and Defense Connections



- Evaluated **the effect on future violence of civilian casualties by ISAF and insurgents**.
Briefed to CJCS ADM Mullen and COMISAF GEN McCrystal in March 2010
- Developed a metric empirically characterizing tribal coherence which, with other factors, appears to be a **predictor of the susceptibility of tribal entities to Al Qaida influence in Africa**.
Briefed at December 2010 joint workshop with SOCOM resulting in operational recommendations.
- Elicited **innovation drivers and key trends in the Chinese defense economy** based on open source Chinese documents and interviews, helping to better understand the reform and the pace of modernization in China's defense industry.
Briefed and concepts shared with ADM Robert Willard, Commander, PACOM in December 2011.
- Built and publicly released a **database on African social conflict** related to environmental drivers, economic downturns, food security, elections, ethnic tensions, and other issues below national armed conflict levels (e.g., strikes, labor unrest).
Social Conflict in Africa Database (SCAD) released March 2011 and shared with AFRICOM J2.
- Learned **small-scale reconstruction projects are violence reducing; large-scale are not**.
Cited, with three other team findings, in Senate Foreign Relations committee report 112–21 on *Evaluating U.S. Foreign Assistance to Afghanistan*



3 Years Later, Minerva is Meeting Its Program Goals



Strategic planning value

“This Minerva information will be helpful to our staff as we determine where our own opportunities and challenges lie in engaging with the PLA S&T community and China's S&T community writ large.”

Kenneth Bruner, S&T Advisor, PACOM

“Minerva is a vital program, and I'd like to see it expand.”

*LTG Michael Flynn,
Assistant DNI*

“Minerva and similar research supports multiple phases of military operations and may lead to alternatives to future combat operations that put so many American lives at risk.”

*LTG Robert Elder (ret),
Sr Advisor, Air Combat
Command Chief Scientist*



“The quality and impact of [CAAT] support to COMISAF and the ISAF mission were greatly enhanced by the timely and much needed contributions from our Minerva sponsored team.”

*COL. Joe Felter, fmr
Commander ISAF CAAT*

Context for Analysts

“I have personally found that the lessons learned from the Minerva workshops have been invaluable in providing the proper framework and perspective for evaluating China's actions.”

*Li Shen, Army Operations Group,
U.S. Army Intelligence and Security Command*

Operational value

“Our unit [is] becoming more analytical and dynamic in how to stabilize populations without relying on money because your [Minerva] works have pointed out indicators that, if done improperly, aid can be counter-productive.”

Capt. A.J. Potter, USMC, 3rd Civil Affairs Group



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<http://minerva.dtic.mil>

<http://minerva.dtic.mil/doc/MinervaResearchSummaries2011.pdf>

QUESTIONS?