Extreme Environments - Development of Decision Processes and Training Programs for Medical Policy Formulation

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GMU Research Team
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Workshop Focus

- Build on the first Workshop
- Expand understanding of Model(s)
- Evaluation and selection of effective tools and processes for medical policy formulation
- Validation of a selected decision making process
Workshop Goals

- Presentation and consensus on analytical/predictive models and tools
- Validation of the parameters to be included in processes
- Validate process through simulated and/or real life exercises
Workshop Goals

- **Evaluate** best practices
- **Establish** a standard process for policy formulation
- **Develop** a standard approach to risk definition and communication
- **Propose** a set of training tools
GMU Research Conclusions

1. No consistent approaches for formulating policies for exploration, travel, or work in extreme environments and

2. Decision-makers need to be educated to understand the importance of:
   A. HEALTH in the context of the human dimension
   B. UNDERSTAND short and long term Health and Safety Impacts in the process of preparing an expedition and/or inserting novel technology
# US Regulations*, Policies & Laws

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*OSHA as applicable

**Legend**
- **H** = Health
- **S** = Safety
Policy Process Essentials

- Systematic, documented, and auditable
- Uniformity of terms and process improves communications reduces omissions/errors
- Evidence-based
- Quantified and qualitative data
- Careful consideration in communicating risks and solutions
- Sensitivity to and awareness of the context and to stakeholders
Scope of Medical Policy Formulation

- **Safety** of the individual, and
- **Health** of the individual
- **Productivity** of the individual in achieving mission success
- **Effectiveness** and/or **liability** of the enabling and protective systems
A Model for Expedition Policy Formulation Process

Integration

*Decision Process

Adapted from Nicogossian 2001
Human Element Interdependency with Environment (s) and Systems

Adapted from A. Nicogossian