Office of the Provost

Dr. Samuel Mukasa
Major Topics to Share

- Recent Faculty Developments/Accolades
- Action Planning (Discovery Challenge+)
- Faculty Demographics and Cluster Hiring
- New Mentoring Programs for Success
  
  I. Faculty: Cohort Career Advising Program (CCAP)
  
  II. Students: ESF Alumni Association Mentors
FACULTY HIGHLIGHTS

Dr. Lee Newman

Named Chair of the Department of Chemistry
Dr. Neal Abrams
Appointed Interim Director of ESF Open Academy
Dr. Bahram Salehi
Appointed National Deputy Director of the Unmanned Aerial Systems Division for the ASPRS
Dr. Steven Shaw
Dr. Lemir Teron
Dr. Bob Malmsheimer
Dr. Doug Burns

Faculty, Alumnus Appointed to State Climate Impacts Assessment Project
Discovery Challenge Projects: A model for grass-roots and top-down coordination

WORKFORCE AND TECHNOLOGY DEVELOPMENT

• Pathways to a Net Zero Carbon Future
• Mass Timber Construction
• Climate and applied forestry research institute
• Contaminants of emerging concern
• Climate change adaptation and mitigation
• ELAP Water Lab
• TIBS
• Healthy Water COE

CARBON

- Environmental medicine and informatics
- Restoration Science Center
- Geospatial analytics for planet earth
- Land management for healthy people

WATER

- Environmental health research
- Environment and water data science
- ELAP Water Lab
- TIBS
- Healthy Water COE

LAND

- Energy and water data science
- ELAP Water Lab
- TIBS
- Healthy Water COE

ENERGY

- Center for Biomass and solar energy conversion
- Sustainable energy management

ECONOMICS AND POLICY

Source: David Amberg, 2019
New Planning Ideas for ESF

**Student Issues**
1. **Access & Affordability**
   - Create the "ESF Promise" for $50K families
   - Establish transition program for URM & 1st gen students
   - Expand academic calendar
   - Broaden community engagement
   - Grow ESF graduate program
   - Speed up completion rates for MS & PhD degrees

2. **Wellbeing**
   - Purposeful curriculum design
   - Introduce community-building activities
   - Continually demonstrate the value of ESF
   - Establish a monthly "Accountability Report"
   - Adapt non-email comm e.g. Mainstay with chatbot
   - Build cohesion between faculty & student support services

3. **Experiential Learning**
   - Build new degree programs w/ experiential learning opportunities
   - Involve students in social & environmental justice causes
   - Grow STEM pipeline by engaging K-12
   - Improve career preparedness programs – academic and career advising, together

4. **Community Engagement**
   - Student lectures to the public
   - K-12 outreach w/ faculty and student orgs.
   - Develop "STEMbassador" program
   - Build partnership with alums to serve as mentors and coaches for grad/ugrad students

5. **Faculty Development**
   - Reimagine pedagogies & modalities
   - Grow fundraising for faculty excellence
   - Grow endowments for research & retention cases
   - Develop "Discovery Challenge Report"

6. **P&T and Governance**
   - Address infrastructure issues to improve research competitiveness
   - Develop faculty clusters in key areas of interdisciplinary research
   - Recruit more int’l PhD students
   - Identify resources to pay GA’s a living wage
   - Resurrect "Discovery Challenge Report"

7. **Research Empowerment**
   - Faculty lectures to the public
   - K-12 outreach with students
   - Promote sustainable practices in community
   - Timely response to community questions

8. **Responsible Citizenry**
   - Unwrap the gem through deliberate branding
   - Develop exchange programs overseas
   - Recruit more int’l students to ESF
   - Maintain core strengths
   - Beautify the campus
   - Develop the "long game" for ESF (long-range plan)
   - Develop highly visible climate action plan

9. **Improved Visibility**
   - Connect with K-12 for recruiting
   - Create an academic transitional program for 1st gen and URM students
   - Train search committees about implicit bias
   - Holistic evaluation of grad/ugrad applicants
   - Inclusive workplace culture
   - Work adaptation – remote & hybrid

10. **Demographics and DEI**
    - Strengthen alumni relations
    - Grow fundraising capacity
    - Grow endowments for student scholarships to fulfill the "ESF Promise"

11. **Campus Issues**
    - Unwrap the gem through deliberate branding
    - Develop exchange programs overseas
    - Recruit more int’l students to ESF
    - Maintain core strengths
    - Beautify the campus
    - Develop the "long game" for ESF (long-range plan)
    - Develop highly visible climate action plan

12. **Cybersecurity Data Analytics**
    - Secure cyber via cloud services
    - Unified data analytics platform (KPIs)
    - Introduce dual authentication
    - Establish a strategy for disruptive technologies (AI, IoT, ML)
Faculty Demographics at ESF

Example: Environmental Biology

• Illustration of our strengths and weaknesses in a single department

• Visualization of developing vulnerabilities in specialization areas due to faculty age demographics

• Allows us to plan opportunistically to balance between fortifying areas of excellence and growth in new and emerging fields
Faculty Replacements – Cluster Approach

Metaphor: “Lone wolf vs Wolfpack”

- Establish interdisciplinary and cross-departmental bridges
- Build a sense of community and belonging by being part of a cohort
- Proven vehicle for helping to diversify the faculty; It is imperative to make diversity goals explicit from the beginning
- A future based on inclusive excellence because we are going to need all hands on deck
- Integration of clusters in the research fabric of the campus
Faculty Cluster Hiring

Recruiting begins before we have a position

- We plan to network directly with young scholars, including our own students, and will invite them to speak
- We will foster connections with other institutions to identify and track promising candidates
- We will widen the pool from which we recruit; actively pursue candidates thriving at less well-ranked institutions
Cohort Career Advising Program

- Faculty cohorts hired together to conduct collaborative research in a preselected area
- Shaping university/college curricula of the future together
- Opportunity to build faculty diversity
  - Casting a wide net during the search
  - Creating a level playing field
  - Holistic review
- CCAP – strategy to multiply one’s network and potentially grow collaborative research
Student Mentoring and Placement

ESF Alumni Association Working With the Provost