Museum of Geology South Dakota School of Mines and Technology Strategic Plan 2019-2023

Approved:	5/14/19	
Dr. Demitris Kouris, Provost, SD Mines	Date	_

Our Vision

The goal of the South Dakota School of Mines and Technology (SD Mines) Museum of Geology (Museum) is to be an accredited and internationally recognized center for collections held in the public trust that provide the foundation for geologic research and science education.

Our Mission

The Museum of Geology at SD Mines explores the natural history of Earth through scientific inquiry, preserves specimens and data as a dedicated repository for scientific research, and promotes understanding of geoscience through outreach and educational efforts.

Our Core Values

- **Discovery:** research, innovation, technology, lifelong learning
- Integrity: professionalism, ethics, transparency, accountability
- **Stewardship:** public trust, preservation, standards and best practices, discretion, diligence
- Cooperation: community commitment, inclusiveness, opportunity

Our Stakeholders

- SD Mines Department. of Geology & Geological Engineering (GGE) students, staff, and faculty
- Other SD Mines students, staff, and faculty
- Federal and state land management and conservation agencies
- Regional museums
- Other educational institutions

- K-12 students and teachers
- Regional tribal governments and colleges
- Visiting researchers
- Community and professional organizations
- Business and industry
- Public visitors

Our Goals, Steps to Achieve Goals, and Expected Outcomes in the Context of the South Dakota School of Mines and Technology Strategic Plan (2019-2023)

Academic & Co-Curricular Excellence – Graduate innovative students in the fields of science and engineering who are prepared to contribute to solving global challenges and serve as leaders in an increasingly competitive and interconnected world.

Museum of Geology contributions

A. Partner with GGE to advance the education programs of both units.

Steps to achieving goal:

- Support the Paleontology MS program, the only such program in the nation, with instruction, research experiences, and professional development opportunities.
- Lead field paleontology programs.
- Maintain formal training of graduate and undergraduate students in preparation, curation, exhibit design, and resource conservation.
- Employ project-based learning using the exhibits and/or collections of the Museum or its collaborating regional partners.
- Use Museum collections to facilitate learning in undergraduate and graduate courses in paleontology.
- Expand opportunities to train and mentor students outside traditional classes as student workers, interns, research assistants, and members of student clubs.
- Provide quality experiences for students seeking community service opportunities as volunteers.

Expected outcome(s):

- The Museum will increasingly be recognized as a center of excellence in STEM, field, laboratory, and collections management education.
- Students will be able to hone field, laboratory, and curatorial skills important for professional training.

Research & Innovation – Promote an innovative and research-driven culture that discovers knowledge and creates wide-ranging partnerships that benefit society through economic growth.

Museum of Geology contributions

A. Facilitate collections-based research for all collections

Steps to achieving goal:

- Provide curatorial oversight for each of the Museum's collections.
- Continuously review all collections and backlogs to prioritize preparation, conservation, and curation activities to support research priorities of students and curators.
- Encourage undergraduate and graduate students to use or add to museum collections in their research projects.
- Provide research experiences for undergraduate students through senior research projects.

- Provide research and/or office space for GGE faculty whose scholarly work enhances Museum activities.
- Ensure that all grant and award applications include funding for competitive student stipends.
- Require PIs to include support for preparation and curation of new specimens and samples in grant and contract proposals as appropriate.
- Develop multiple long-term research initiatives that take advantage of Museum facilities and collections.
- Curate, digitize, and make publicly accessible (as appropriate) all Museum collections.
- Associate collections with at least one curator with subject matter expertise relevant to that collection.

Expected outcome(s):

- The Museum will increasingly be recognized as a major repository and center of excellence for paleontological research and collections management.
- All collections will support active research projects that benefit the Museum.
- All collections and their data will be available (as appropriate) on campus and through online resources.

Outreach & Engagement - Build recognition and respect by promoting the unique achievements of our students, faculty, and staff and increasing engagement with alumni, stakeholders and the community.

Museum of Geology contributions

A. Achieve accreditation through the American Alliance of Museums (AAM).

Steps to achieving goal:

- Host accreditation visit by AAM in Fall 2019.
- Compile quarterly data on collections, exhibits, and programs, and collate these data.
- Maintain an active advisory panel for the Museum as a committee of the GGE advisory board.
- Review the strategic plan annually with staff and the Museum advisory committee.

Expected outcome(s):

- Accreditation will greatly enhance the Museum's public and professional profile and fundability.
- B. Enhance and expand partnerships.

Steps to achieving goal:

- Foster partnerships with federal, tribal, and state land management agencies for the care of both specimens and data held in the public trust.
- Partner with other regional institutions (museums, colleges, governmental agencies, etc.) on joint program and funding opportunities.

- Participate in SD Mines sponsored outreach and informal education efforts (e.g., Youth Programs, Women in Science and Engineering) and facilitate outreach through student organizations (i.e., Tech Paleontology Club).
- Develop and maintain strong relationships with current and potential donors, in partnership with the SD Mines Foundation and Museum advisory panel.
- Secure gifts to help support staff positions, collections activities, exhibits development, laboratory facilities, student opportunities, and curator support.

Expected outcome(s):

- The Museum will engage as a full partner with our regional stakeholders.
- C. Increase community engagement by upgrading the public floor, exhibits, programs, and accessibility.

Steps to achieving goal:

- Increase staffing to include an education/outreach professional to develop and implement an informal earth science education program, as both in-house and outreach modules, in conjunction with K-12 STEM educators.
- Regularly evaluate and upgrade permanent exhibits; develop new exhibits as resources allow.
- Use rotating exhibit space to highlight current research in the Museum and/or GGE.
- Expand internet and social media presence.
- Plan for upgrading the infrastructure of the public floor.
- Promote tours of both the Exhibit Hall and Paleontology Research Lab.

Expected outcome(s):

- We will advance our unique mission within SD Mines to provide public educational activities and resources in STEM areas.
- D. Expand community volunteer opportunities.

Steps to achieving goal:

- Increase staffing to include a volunteer coordinator to develop a systematic training program for dedicated volunteers.
- Recruit volunteers from several demographics, including pre-college and college-level students, and community members.

Expected outcome(s):

- Attract and retain a long-term volunteer corps to support Museum efforts.
- Increase the public profile of the Museum through person-to-person outreach and learning experiences.

Campus Culture – Strive to make our campus a place where students, faculty, and staff thrive in an inclusive, equitable, diverse, and creative environment.

Museum of Geology contributions

A. Engage student clubs in outreach activities.

Steps to achieving goal:

- Continue to host and advise the Tech Paleontology Club and support their activities.
- Involve the Tech Paleontology Club in creation and maintenance of teaching kits for outreach events.
- Continue to include student clubs in Museum-sponsored events on and off campus.

Expected outcome(s):

- Students will gain experience in informal STEM education outreach.
- B. Promote safe practices in the lab and field.

Steps to achieving goal:

- Regularly review and update field and laboratory safety policies, lab and field safety training programs, and the Museum's Disaster Response Plan.
- Use campus-wide safety programs as they become available.
- Install security cameras in Museum facilities.
- Enhance accessibility and security of shelter-in-place space for Museum facilities.

Expected outcome(s):

- The Museum will be a secure learning environment exemplifying the highest standards of safety.
- C. Ensure that the Museum is an inclusive space for all students, staff, and faculty.

Steps to achieving goal:

- Encourage staff and faculty participation in campus-wide cultural diversity programs and activities.
- Plan for ADA improvements for the public floor so it becomes fully accessible.
- Promote the Museum to the campus community.
- Support Mines Advantage with Museum activities.

Expected outcome(s):

• The Museum will be a welcoming environment for the entire campus community.