Position Title: Research Associate

FTE: 75%-80% Immediate Supervisor: Alex Brasili Salary Range: \$60,000-\$75,000 depending on experience - pro-rata (i.e. annual salary range for a 75% position is \$45K-\$56K)

The Maine Math & Science Alliance (MMSA) is a 501(c)3 nonprofit organization that finds inspiring new ways to get people excited about science, technology, engineering and math today, so that our youth can become the innovators and workforce of tomorrow. MMSA supports educators to teach science, technology, engineering and math in more meaningful ways by:

- Developing professional development experiences for K-12 educators
- Conducting research and evaluation of STEM learning experiences
- Building relationships and networks to sustain systemic statewide improvement

MMSA offers a work culture that is very team-oriented, welcomes a mix of working-from-home and from-the-office work schedules, and is rooted in the belief that high quality professional development and programming can influence the future of our state. MMSA staff includes some of the best talent in STEM education, including researchers and curriculum specialists.

MMSA provides an excellent benefits package including paid holidays and vacation time, a flexible work arrangement policy, health, dental, and life insurance, short and long-term disability, extended family medical leave, and up to a 10% retirement fund match.

Essential Qualifications:

The ideal candidate may bring a broad combination of prior experience including formal classroom teaching, informal STEM education, environmental education, curriculum design, program evaluation, educator professional development, and/or structured learning research.

- MA/MS or higher; or a combination of education and previous experience
- At least 3 years of experience contributing to formal or informal science education research. This experience may include research on curriculum development, educator professional development, student learning, action research projects, etc.
- Proven ability to understand goals, take initiative, and follow-through with attention to detail;
- Demonstrated experience coordinating multiple priorities;
- Strong oral and written communication skills, with the potential to contribute to academic writing;
- Demonstrated experience building and maintaining relationships with educators, students, and community partners both virtually and in-person;
- Experience, comfort, and ease working with educators and/or youth in formal or informal K-12 science settings;
- Enthusiasm and passion for making a difference in science education; and

• Strong interpersonal skills and the ability to work as an essential and productive member of a team.

Essential Research Skills:

- Ability to communicate and schedule research activity including emailing or phoning research participants, scheduling interviews, and maintaining a record of communication;
- Demonstrated ability to manage and manipulate databases and spreadsheets;
- Experience with quantitative and qualitative data analyses;
- Ability to film and edit video footage for use in research studies;
- Ability to pass a Maine Department of Education background check (required for in-school work)
- Ability to work with project management software such as Microsoft Excel and Word; cloud-based systems such as Google Drive and Airtable; and video-conferencing applications such as Zoom. Preference given to individuals with experience in statistical and qualitative analysis software (i.e. SPSS, Dedoose, Nvivo, Otter.Ai).

Purpose of the position:

This position will be a key team member of the SaP (Sensemaking about Place-based Phenomena: Mobilizing Rural Teacher Learning to Propel School Wide Transformation (NSF Grant #2405435) project at MMSA. The goal of the project is to support 3rd-5th grade teachers and their administrators in incorporating locally or culturally relevant place-based phenomena into rigorously tested curricular units that meet the expectations of the NGSS. Teachers and their administrators will receive professional learning over the course of three years, leading to those teachers becoming designers of their own curricular units. As a collaborative grant, SaP has partners in both Montana and Hawaii.

This position will also support the Teach ME Outside project. Teach ME Outside is a collaborative project that supports and works in partnership with Maine communities to ensure that all Maine youth have access to powerful, hands-on environmental learning opportunities. This person will also lend capacity to Teach ME Outside by leading the planning, implementation, and analysis of qualitative and quantitative data for the third Census of Community-Based Environmental Learning in Maine; tracking participation in TMO events; and collecting data at convenings.

The Research Associate will:

- Conduct interviews with educators and administrators, by phone, online, and in-person;
- Prepare data collection tools and other materials for fieldwork;
- Conduct observations of classrooms and professional learning experiences;
- Edit recordings from classrooms and professional learning sessions;
- Take detailed notes and ask clarifying questions where needed;
- Code, organize, and analyze both qualitative and quantitative data;
- Write and edit reports;

- Contribute to conference presentations and journal manuscripts;
- Create and maintain data storage and documentation systems;
- Communicate and coordinate with educators, and,
- Other duties as assigned.

This position requires in-person attendance at monthly organization-wide meetings at the MMSA offices in Augusta, Maine. Occasional travel within Maine and nationally, including occasional overnight stays, will be required for project-related activities, science consulting contracts, events, and conferences, with travel expenses covered by MMSA. It is expected that the person in this position resides in New England, or is willing to move to New England upon hire. This position can work from home for part of the time if desired. MMSA will provide a laptop and essential home office equipment (e.g., external monitor, laptop stand).

Applicants must be authorized to work for any employer in the U.S. We are unable to sponsor or take over sponsorship of an employment Visa at this time.

Please send a letter of interest that outlines your experience against each of the selection criteria above and resume by email to hr@mmsa.org or by regular mail to Human Resource Manger, PO Box 2246, Augusta, Maine 04338.

Materials should be submitted by Friday, July 25, 2025 to ensure full consideration.