



Associate Laboratory Director, Physical Sciences Division

BASIC FUNCTION

The Associate Laboratory Director, Physical Sciences Division (ALD-PS) has overall responsibility for the orchestration and execution of TRIUMF's scientific program in particle and nuclear physics, molecular and materials sciences, and theory. He/she represents and promotes TRIUMF and its science program on the world-stage through international collaborations, conferences, and forums.

ORGANIZATIONAL RELATIONSHIPS AND CONTACTS

The position reports to the Director of TRIUMF and works collaboratively as a member of the laboratory's Senior Leadership Team. Internal contacts include interaction with the Deputy Director, other Associate Laboratory Directors, and Senior Managers, as well as with researchers, engineers, technicians, and administrators throughout the laboratory. The ALD-PS develops and maintains close relationships with senior physicists and contacts at TRIUMF's member universities, and actively promotes collaborations with international partners sharing common interests. Active engagement is expected with TRIUMF's Board of Management, CNSC, ACOT, and other governing, regulatory, and advisory bodies.

SUPERVISORY JURISDICTION

Department Heads in the areas of particle, nuclear, molecular and materials sciences, theoretical physics, and science technology report directly to this position, as does an Assistant who provides administrative and secretarial support. A Deputy ALD-PS provides support and acts as an alternate when required. The ALD-PS is also responsible for all TRIUMF-supported university-based faculty in the above scientific fields, as well as all TRIUMF Emeriti in the same fields.

PRINCIPAL ACCOUNTABILITIES

1. Mindful that TRIUMF is moving into the ARIEL era, provides leadership and vision in overseeing TRIUMF's Physical Sciences program and its direction, including day-to-day experiment operations and the development of the experimental and technical infrastructure of the Division. Advocates for the science to sponsors and stakeholders.
2. Creates and maintains a Division capable of achieving established goals within available resources. This includes defining objectives and identifying the priorities for the program of work; providing direction to all divisional Department Heads; optimizing organizational structure; selecting and mentoring key staff members; motivating employees; and carrying out performance reviews of reporting staff. Demonstrates commitment to building and developing a diverse and talented team of staff and trainees in the Division and across the laboratory.
3. Is accountable for ensuring that the safety and quality standards of TRIUMF experiments are consistent with the TRIUMF standard operating procedures.
4. As a member of the Senior Leadership Team, participates collaboratively in defining laboratory-wide science goals and development strategies.
5. Takes a lead role in decision-making and strategic planning (long- and short-term) for the Division, and in developing and managing budgets for operations, research development, and new projects and initiatives.
6. Is responsible for the Subatomic Physics Experiment Evaluation Committee and the Molecular and Material Sciences Experiment Evaluation Committee.
7. Is responsible for overseeing and approving beam scheduling for experiments, and transitioning ISAC from a single-user to multi-user facility. Takes advantage of existing and emerging opportunities to further develop a world-leading RIB physics program on site.
8. Ensures Canadian leadership in major international particle physics experiments, in advanced detector development and construction, and in high performance computing.
9. Leads the molecular and material science program, exploiting the world-class muSR and beta-NMR facilities to develop a robust user community.

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10. Oversees a dynamic theory program in nuclear and particle physics to drive new discoveries.
11. Actively promotes collaborations with international partners and fosters strong working relationships with scientists and senior-level contacts at other laboratories, related institutions, federal and provincial governments, and professional organizations of scientists using TRIUMF's facilities throughout Canada and the world (e.g. IPP, CINP, CAP, etc.) sharing common interests.
12. Identifies opportunities for tech transfer / commercialization of relevant technologies and work for others.
13. May pursue his/her own research program, apply for NSERC funding grants, supervise graduate students, and teach undergraduate or graduate courses in affiliated universities.

SCOPE OF DECISION MAKING AND PROBLEM SOLVING

Decision-making is based upon a thorough knowledge of the annual budget, TRIUMF priorities, the Division and the laboratory's short- and long-term goals, as well as international science programs and trends. The incumbent will also rely on availability of staff, technical knowledge, experts' advice, past precedents, and financial considerations. Prerequisites for the position include the ability to forge consensus, the flexibility to see the "bigger picture" while being willing to roll up one's sleeves, the sense to know what is doable and what is too risky, and an understanding of impacts on staff morale. Critical decisions affecting the budget are made in consultation with the Director. Problem solving must be based on sound judgment using knowledge and experience, keeping TRIUMF at the forefront of research and innovation, and its reputation and image in mind at all times.

KNOWLEDGE AND SKILLS

This is an operational and a scientific leadership position. An in-depth understanding of TRIUMF's science program and its place in an international research context is crucial. Visionary skills and a forward-thinking mindset are required to take TRIUMF into the ARIEL era and to develop or approve future programs and experiments. Outstanding general operational management skills are needed to carry out the responsibilities of this position, while effective decision-making and problem-solving are necessary for issues encountered day-to-day and long-term. Exceptional communication, collaboration, and interpersonal skills are essential requirements. Excellent relationship building skills, demonstrated leadership qualities, and the ability to delegate are all necessary. First-rate project management skills and experience controlling scope, cost, schedule, and risk are essential.

QUALIFICATIONS

Ph.D. in nuclear or particle physics or a related field, or the equivalent combination of education and training. Internationally recognized accomplishments, leadership, and management experience.

CRITICALITY

This position is critical for the performance of the Physical Sciences Division, and of TRIUMF more broadly. The ALD-PS has responsibility for much of the laboratory's program, including experimental user operations, the safety of all divisional workers and experiment users, and the overall performance of staff within the Division. Poor performance in the position will have international repercussions in terms of lost reputation and credibility, which in turn will lead to diminished stature for the laboratory in Canada and beyond.

JOB DIMENSIONS:

Is responsible for a Divisional budget of approximately \$9M for operations, projects, and salaries. Divisional staff complement averages 83. At the present time the distribution is: 26 Board Appointed Scientists; 11 University Based Faculty; 28 Engineers and Other Physicists; 7 Postdocs and RA's; 10 Technicians; 1 Admin Support. In addition to the staff complement, the Division is also host to grant funded positions for which the ALD is ultimately responsible. The current complement is 64, and includes Postdocs, Engineers, Technicians, and Students. Oversight is provided to Emeritus appointments, currently 11.