

**Permanent Position | Director of Operations, SHyNE Resource**  
NUANCE Center - Northwestern University

NUANCE, Northwestern University's Atomic and Nanoscale Characterization Experimental Center, is seeking candidates for a permanent Director of Operations for SHyNE Resource, a 10-year, \$10.5M NSF facilities program. [NUANCE](#) manages over 100 characterization, analysis, and fabrication instruments in service to over 1000 unique Users from 145 faculty groups in 35 departments across Northwestern. NUANCE brought Northwestern into the NSF's National Nanotechnology Coordinated Infrastructure ([NNCI](#)) network; branded as the Soft-Hybrid Nanotechnology Experimental ([SHyNE](#)) Resource, operational support was extended to 5 other open-access research facilities (IMSERC, NUCAPT, SQI, Cohen XRD, PLD) at Northwestern and the Pritzker Nanofabrication Facility (PNF) at University of Chicago. Through these enhanced outreach efforts, NUANCE and SHyNE annually works with over 200 external researchers from regional academic, non-profit, government, and commercial/industrial organizations.

The preferred candidate will have demonstrated expertise in advanced fabrication, characterization, and analysis techniques/skills and have demonstrated the ability to facilitate laboratory sessions for hands-on course and curricula related to conventional and advanced electron microscopy. The candidate will be capable of using software for simulation, modeling, and tomographic reconstruction, as well as other software-related advanced imaging/spectroscopy analysis. The successful candidate will be customer-oriented and demonstrate the ability to design experiments and research programs to solve innovative problems in atomic and nanoscale analysis and characterization.

The selected candidate will regularly consult and collaborate with users on experiment design & research in electron microscopy, sample preparation and general lab equipment. There are ample opportunities for independent and collaborative research utilizing advanced S/TEM. With the recent installation of an advanced aberration-corrected S/TEM instrument, prior experience with AC-S/TEM is desirable, but not required.

Duties:

External User program:

- Explore and engage with potential regional External Users (generate database)
- Demonstrate Center value proposition to potential External Users
- Oversee execution of Center External User program
- Oversee External Users' multi-facility access, agreements (NDAs, Master Services, etc..)
- Assess Center equipment needs based on External User input
- Conduct and facilitate collaborative research in User facilities

Communications:

- Coordinate Center strategic planning, data management, reporting
- Maintain Center User lists, liaise with Alumni relations, Corporate relations
- Oversee Center Web/Social Media communications, Outreach programs (Museums, Nano-Journalism)

Qualifications:

The preferred candidate will have

- Obtained a PhD in physical or life sciences and/or engineering field.
- 5+ years' professional experience managing open-access research facilities.
- Demonstrated progressively greater responsibilities
- Experience and/or strong interest in the business of higher education and research.
- Ability to travel domestically, estimated at 5-6 times per year.
- Availability for occasional evening and/or weekend events.

Complete applications will include: Introduction letter, Curriculum Vitae, Statement of plans for research (3 to 5 pages), Contact information for three references (names, postal & email addresses, phone number). Materials will be submitted as a single PDF to: [nuance@northwestern.edu](mailto:nuance@northwestern.edu)

*Northwestern University is an Equal Opportunity, Affirmative Action Employer of all protected classes, including veterans and individuals with disabilities. Women, racial and ethnic minorities, individuals with disabilities, and veterans are encouraged to apply. Hiring is contingent upon eligibility to work in the United States.*