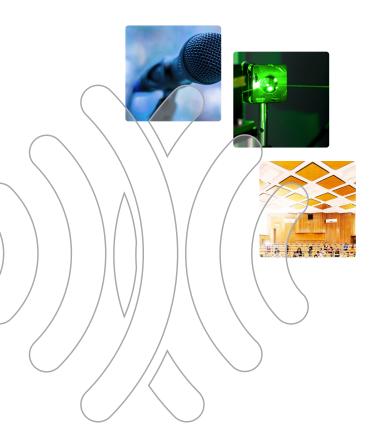


Architectural Acoustics • AV Design • Noise & Vibration

Recording/Production/Broadcast Studios

Statement of Qualifications

Acoustical Consulting & Audiovisual Design



ABD Engineering & Design

ABD Engineering & Design is an independent acoustical engineering and audiovisual design firm, proud to be a nationally and state (OR, WA) certified Women Owned business. We work with you to provide practical solutions with options that allow for informed decisions. Our timely communications and responsiveness give you the right information at the right time. The cornerstones of ABD's work include data collection on site, research, and calculations to deliver evidence-based designs. With decades of experience across multiple markets, and a team of consultants from varied backgrounds, you can count on ABD to bring you the best in audiovisual design and acoustical consulting.

At ABD, we strive to create a future where every day spaces meet the acoustical and audiovisual needs of every person. We are committed to providing an open, inclusive workplace where everyone, no matter what their background or where they come from, can learn and grow to their full potential.

Certifications

WBENC: WBE1701950 **OR-COBID-WBE**: 11342 **WA-OMWBE**: W2F0027557

WI-WBE: WI-13264



Professional Memberships

Acoustical Society of America Institute of Noise Control Engineering American Society of Testing and Materials National Council of Acoustical Consultants AVIXA (CTS-D)

Staff Count

Acoustics = 8 Audiovisual = 2 Leadership/Admin = 2

Contacts

Principal Engineer: Melinda Miller, PE mmiller@abdengineering.com **Contracts/Billing:** Marci Boks, COO mboks@abdengineering.com **New Projects:** Brian Atkinson, client@abdengineering.com

Incorporated: S-Corp incorporated 10/30/2001 in the State of Michigan

EIN: 38-3631490 DUNS: 104088682 NAICS Code: 541330

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Recording/Production/Broadcast Studios

Acoustical Engineering and Audiovisual Design



Critical to any recording or performing environment is a fluid marriage between acoustics and technology. At ABD Engineering & Design, our consultants are experts at combining enhanced audio and video systems with optimized room acoustics. The result is a fantastic creative environment for performers and technicians alike. Recording spaces, radio and television studios, and sound stages for film and video all require spaces that maximize acoustical performance while minimizing distractions from noise (from inside or outside the rooms). Renovating and re-purposing existing buildings and space often require noise studies to keep desired sound in, and unwanted noise out. As an independent acoustical consulting and AV design firm, we take into account the whole equation, from the talent to the recording staff, and we design spaces where every expression can be seen and heard with pristine clarity.

Audiovisual Systems Design experts at designing custom AV systems, and we work closely with our clients to determine their specific technology needs. We design systems for every level of production, from intuitive designs for student spaces to sophisticated systems for professional production. Costs are estimated early in the process to bring needs and desires in-line with the budget. When a client wants to choose their own equipment, we design the infrastructure to support their system design. We create audiovisual systems drawings and specifications, working with project architects to integrate the equipment into their designs and working with engineers to advise on AV equipment heat and electrical loads.

BIM Design

Building Information Modeling (BIM) is an intelligent 3D modeling and databasebased process that gives architecture, engineering, and construction (AEC) professionals the insight and tools to more efficiently plan, design, construct, and manage buildings and infrastructure. ABD's design professionals use BIM as a collaborative design process, not just a documentation tool, making use of Cloud-based resources for smoother real-time collaboration with our partners. Our team performs QA/QC within the model for accuracy beyond what appears on a drawing or sheet. We're using Revit families for better visualization. This helps our clients gain insight into system performance, loudspeaker coverage, projection system geometry, and sight lines. ABD's BIM process also provides more accurate coordination with other disciplines including MEPS, lighting, furniture, and specialty equipment.



Architectural Acoustics

Great recording spaces have great acoustics, optimized for performed music, voiceover, and actors. At ABD Engineering & Design, we use 3D modeling software to accurately predict the acoustical response of to accommodate the varying needs. In existing spaces, we take high tech sound measurements to map the "acoustical fingerprint" of the room. This data enables us to offer detailed recommendations for construction features that optimize reverberation and maximize speech intelligibility, creating an even acoustical response throughout the studio.

Objective Recommendations
As an independent acoustical and AV

consulting firm, we have no affiliations with or affinity for any particular brands, products, technologies, or suppliers. We bring objectivity and unbiased recommendations that are best suited to your facility – procured through a competitive bid process to create superior designs at or below budget.



Experience

The ABD Engineering & Design team has extensive acoustical design and engineering experience. In addition, staff members have held teaching and research positions at various colleges and universities and regularly conduct educational seminars, conferences, workshops, and institutional training sessions on acoustics, and environmental noise and vibration control.

LEED Design

The LEED design guidelines set the pace for a higher standard in sustainable facility design. Our professional engineers are well versed at meeting the LEED for prerequisite requirements for reverberation time, sound transmission, and background noise levels, and will guide you through the LEED certification process.

Green Design

ABD Engineering & Design is a leader in the acoustical and AV design community for creating sustainable facilities. Our own Green Initiatives put theory into practice to reduce our own corporate carbon footprint. Every employee's "green ideas" help to improve energy efficiency and environmental quality of life. These organic solutions improve all of our offices, further solidifying our commitment to the environment.



Recording/Production/Broadcast Studios Selected Experience



April Music Seoul, South Korea Listening Reference Room

Detroit Institute of Music Arts (D.I.M.E.)
Detroit, MI
Rock Music School
Classrooms, Performance, Practice, Recording

studios

Eckel IndustriesMorrisburg, Ontario
Apple Listening Room
Motorola Listening Room

Grand Rapids Community CollegeGrand Rapids, MI
Albert P. Smith Music Center
Recording Studios, Composition Studios

Hope College Holland, MI Martha Miller Center for Global Communications TV Studios, Recording/Production Studios



Interlochen Interlochen, MI Music Complex

Michigan State University East Lansing, MI Community Music School Detroit, MI Community Music Center

Music Settlement Cleveland, OH Music School in mixed-use development Music Therapy/Observation **Nestle Production Studio**

Cleveland, OH Noise Study Warehouse adaptive re-use to Corporate Production Studios

Ren Sin Ventures Recording Studio Cleveland, OH Noise Study Garage adaptive re-use to Recording Studio



Schweitzer Engineering Laboratories Pullman, WA (projects under NDAs) 80,000 SF Conference Center Video Studio Expansion

South Salem High School Salem, OR Broadcast Studios, Production Studios

Spartan StoresByron Center, MI *(starting design)*Video/Photo Production Studios

St. John Paul II Catholic Church Cedar Springs, MI Streaming Services

Ted Lasker Studio Leggett, CA Barn adaptive re-use to Recording Studio

University of Michigan Ann Arbor, MI Digital Education and Innovation Lab Inst for Healthcare Policy & Innovation Journalism & Screen Studies Relocation

University of OregonEugene, OR
Experience Hub: Broadcast Suite, Podcast
Studios, Production Studio, Control Room.

Western Michigan University: Kalamazoo, MI WMUK Radio: Broadcast Studios

Video Studio Expansion: Eastern Washington

This listing recessors portions of the collective garden.

This listing represents portions of the collective career experience of the ABD Engineering & Design Staff.



School Broadcast Studios

Project Name Location Wheaton Academy Academic Building

West Chicago, Illinois

Year Completed Budget-Size August, 2024

\$30M - 32,290 SQ FT

Description

ABD Engineering & Design worked with AMDG Architects on the academic building addition that included Broadcast Studios, learning spaces, and commons.

ABD's audiovisual design first addressed master planning to establish standards for the project and the school. We provided peer-review of the low-voltage contractor's classroom AV for the academic spaces. Our audiovisual infrastructure and systems design for the broadcast spaces and commons, including a large video wall.

Our Acoustical consulting services included room acoustics, noise isolation, and mechanical noise control focused on the broadcast suite. The studio required variable room conditions, low sound transmission from and to other spaces, and a low noise floor required for the studio recording areas.









Video Studio Projects

Project Name Video Studio Expansion

Location Eastern Washington State

Description

ABD Engineering & Design was hired by a national engineering firm to assist with the expansion and improvement of their existing video studio in Eastern Washington State. The studio, in the basement of a 5-story office building, presented a number of acoustical challenges, including a fast-paced schedule and finding practical solutions for the existing space to meet their needs without over-designing.

ABD's acoustical consultants worked with our client to develop a plan for the studio and the modifications needed to achieve their production goals. Our recommendations included details for the room acoustics, noise isolation, and mechanical noise control. True for any recording space, the mechanical system noise needed to be low enough not to interfere with the program audio, while acoustical treatments needed to blend into the room and be out of view from the cameras. Likewise, the studio is now isolated from adjacent spaces to avoid sound-transfer into and out of the room.

Following their first recording session, they said, "The space looks great and the end users are happy."







University Projects

Project Name University of Oregon Allen Hall Experience Hub

Location Eugene, Oregon

Size SF

Year Completed 2019

Description

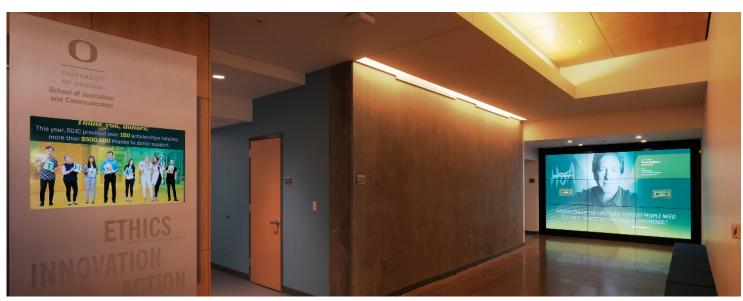
ABD Engineering & Design worked closely with PIVOT Architecture, and University of Oregon staff on the Allen Hall Experience Hub renovation. The facility is shared by different groups including: the School of Journalism and Communications, immersive media, games development, psychology and counseling, and traditional media faculty. The school demonstrated the need to replace the existing traditional broadcast studios with spaces for new and emerging media. ABD provided complete acoustical engineering, audiovisual design, and AV infrastructure design.

Tech-spaces included new broadcast suites, control room, podcast, digital media editing in conjunction with surround audio mixing, and a social media lab with real-time analytics monitoring, as well as host UC/web-conferencing and streaming applications on a large video-wall. Virtual Reality and Augmented Reality share space with collaborative games development. Common-area upgrades included the replacement of existing lobby signage, as well as a new wall-sized interactive display system to showcase significant alumni and donors.









Performing Arts School

Project Name Interlochen Center for the Arts
Music Center

Location Interlochen, Michigan

Project Size & Cost 65,000 SF, \$24 million

Year Completed 2019

Description ABD Engineering & Design worked with Cornerstone Architects to develop complete acoustical recommendations for the state-of-the-art Music Center.

The Music Center includes a variety of acoustically critical listening spaces: teaching studios, practice and ensemble rooms, recording studios and rehearsal spaces. Recommendations for reverberation time, isolation, and background noise extended into classrooms, and offices.

"The new Music Center provides the opportunity to incorporate 21st century expectations into our already rich music curriculum. ... Music students will have even greater success and Interlochen as a whole will be able to expand offerings and enhance the curriculum."

- Camille Colatosti, Provost, Interlochen Center for the Arts









University Projects

Project Name Grand Rapids Community College

Albert P. Smith Music Center and Linn Maxwell Keller

Performance Hall

Location Grand Rapids, Michigan

Year Completed 2017

Description

The original building was constructed in 1922 and served as a physical education facility for Strong Junior High School, and then Grand Rapids Junior College. It was first renovated for use by the Music Department in 1980. This latest renovation includes a new 100-seat performance space (The Linn Maxwell Keller Performance Hall) with flexible seating and stage, recording studio, private studios, teaching studios, practice rooms, classrooms, and an informal gathering and study area.

ABD Engineering & Design worked with AECOM to provide complete acoustical analysis of existing spaces marked for re-use and a variety of new spaces. The design required engineered recommendations for Room Acoustics, Noise Isolation, and Mechanical Noise Control specifically tuned for performance, and teaching. Our consultants created designs to handle the demanding acoustical needs of spaces that would be in constant flux – changing from one use to another throughout the day, and throughout the year.







K-12 Projects

Project Name Detroit Institute of Music Education (DIME)

Architect Neumann/Smith Architecture

Cost \$7,000,000

Year Completed 2014

Description

British music industry veterans Kevin Nixon, Sarah Clayman, and Bruce Dickinson founded the first of these modern music education schools in England, and expanded to Detroit. The 1897 historic Bamlett building now houses the new DIME campus in the heart of downtown Detroit's Capitol Park. Special attention was needed to preserve the original architectural character of the building, including its arched corridors, memorable curved brick, and stone façade.

Neumann/Smith Architecture brought ABD Engineering & Design into the project to provide complete acoustical consulting services. All six floors of the building had experienced decay and no longer met city building codes. Previous offices were transformed into classrooms, music practice studios, and a 300-seat live music venue for weekly concerts. Along with special considerations for room acoustics, additional sound insulation was required between each floor due to the nature of DIME's music business. The special entertainment and acoustic needs of the school required an elaborate material installation, and the latest and most effective noise control materials available on the market today.









University Projects

Project Name Hope College, Martha Miller Center for

Global Communications

Location Holland, Michigan

Project Size 49,000 SF, \$12 Million

Description ABD Engineering & Design made comprehensive recommendations for architectural acoustics, HVAC noise control, and noise isolation. The facility provides a centralized location for radio,

television and newspaper productions, and it also serves as a classroom facility

for instruction of communications, foreign language and international studies. Along with faculty offices, four classrooms, a 90-person auditorium, language and computer labs, television and radio stations with editing suites and a newspaper production facility are provided.

Of particular concern at this facility was the location of a railroad track just a short distance away. In addition, a nearby level crossing meant that the train whistle could impact noise levels inside the television and radio studios and edit suites. A "room within a room" design created a facility that is host for the award winning Children's Television program "Come On Over". The show has won numerous Michigan Emmy awards!







University Projects

Project Name Western Michigan University

WMUK Radio

Location Kalamazoo, Michigan

Architect Kingscott Architects

Description The Yoshimi Takeda Performance Studio at

WMUK is used to broadcast quality recordings of the Kalamazoo Symphony Orchestra, Fontana Chamber Arts, the Gilmore, and visiting artists. In addition, the studio is capable of multi-track digital recordings in an intimate, acoustically-tunable environment designed for the comfort and creativity of performing artists. ABD was the acoustical consultant for room acoustics, noise isolation, and building systems noise control.







Melinda Miller, PE Principal Engineer LEED AP BD+C, EDAC, INCE Bd. Cert. mmiller@abdengineering.com

Melinda Miller brings her passion for all things sound and 20 years of experience to her role as Principal Engineer of ABD Engineering & Design. Her expertise includes diagnosing and preventing noise problems, designing acoustically optimized environments, and using evidence-based design practices. Melinda has consulted on projects involving architectural acoustics, noise isolation, mechanical noise control, and occupational noise exposure. Her experience includes higher education, K-12 schools, performance and worship spaces, healthcare facilities, industrial facilities, hotel and multi-family residential buildings.

A Professional Acoustical Engineer, licensed by the State of Oregon, Melinda earned her Bachelor's Degree in Mechanical Engineering from the University of Idaho, and Master's from the University of Illinois, Chicago. She has continued her education and training, earning her INCE Board Certification (INCE Bd. Cert.), Evidence-Based Design Accreditation and Certification (EDAC), and LEED AP BD+ C. As an Assistant Professor of Acoustics for Columbia College, she taught undergraduate junior and senior level classes in HVAC design, vibrations, acoustical testing, building noise control, and musical acoustics.

Melinda has chaired sessions on various topics at Noise-con and Inter-noise since 2013, and has served INCE as the Co-Chair of Building Acoustics Technical Activities committee, on the Certification Board since 2018, and the Board of Directors (2021-2024). Likewise, she has presented technical papers and education sessions for the Acoustical Society of America, the American Institute of Architects, and the Chicago Chapter of the Audio Engineering Society.

Professional Experience

- 2011-Present Principal Engineer, ABD Engineering & Design, Inc., Portland, Oregon
- 2006-2009 Acoustical Consultant, Listen Acoustics, Inc., Portland, Oregon
- 2003-2005 Assistant Professor, Audio Arts and Acoustics Department, Columbia College Chicago, Chicago, IL
- 2001-2003 Graduate Assistant, Acoustics and Vibrations Laboratory, Department of Mechanical & Industrial Engineering, University of Illinois Chicago, Chicago, Illinois

Professional Licenses and Memberships

- · Acoustical Society of America
- Evidence-Based Design Accreditation and Certification (EDAC)
- Institute of Noise Control Engineering (INCE), Board-Certified Member
- · Institute of Noise Control Engineering (INCE), Certification Board, and Board of Directors
- National Council of Acoustical Consultants
- State of Oregon, Professional Engineer, #88158PE
- U.S. Green Building Council LEED AP BD+C

Education

- · Master of Science in Mechanical Engineering, University of Illinois at Chicago, Chicago, Illinois, 2003
- Bachelor of Science in Mechanical Engineering, University of Idaho, Moscow, Idaho, 1998.

- Linfield College, Murdock-Graf, McMinnville, OR
- Schirle Elementary School, Salem, OR
- 1122 SE Hawthorne, Residential Mixed Use, Portland, OR
- German Village, Residential Mixed Use, Columbus, OH
- Victory Charter School, Performing Arts, Nampa, ID
- Sprague High School, Salem, OR

- Portland Community College, Cascade Campus, Public Service Education Building, Portland, OR
- Tillamook High School, Auditorium, Tillamook, OR
- Oregon Humane Society, Portland, OR
- Wenaha Baker Schools, Theater, Baker City, OR
- PDX Power Punch, Title Boxing Fitness, Portland, OR
- Oregon State University, Fairbanks Hall Renovation, Corvallis, OR
- Mayo Clinic, Behavioral Health, Albert Lea, MN
- University of Oregon, Autzen Stadium, Eugene, OR





Erik J Geiger has designed and consulted on audio, video, and technical systems for over 20 years. He has served as an Audiovisual discipline leader and project manager, and carries a wealth of technical system consulting and design experience. Erik brings the heart of a teacher to every project, helping clients and end-users to understand a rapidly changing environment — having held a position at Columbia College, Chicago for many years.

Erik specializes in planning, budgeting and needs analysis studies for audiovisual and media technology-based systems, with a focus on facilities and infrastructure planning to provide life cycle value and long-term cost savings through accommodating future

technologies, some of which may only be emergent.

Erik has designed large scale facility-wide audio, video and media distribution systems, leveraging IT network topologies and convergence, as well as high performance sound-reinforcement and large-scale video display systems, recording and media post-production facilities. He has designed interactive and collaborative communications environments, that both augment and move beyond the traditional audio and video conferencing space. He has worked on projects in healthcare, university, K-12 education, and corporate environments, along with auditoriums, convention centers and hospitality venues around the world.

When Erik isn't designing technical systems, he enjoys playing the piano, backpacking, cycling, and photography.

Professional Experience

- 2016-Present Director of Audiovisual, ABD Engineering & Design, Inc., Portland, Oregon
- 2011-2016 Senior Associate, Shen, Milsom & Wilke, LLC Chicago, Illinois
- 2007-2014 Adjunct Professor, Audio Arts & Acoustics, Columbia College Chicago, Illinois
- 2009-2011 Owner, Geiger Design Consultants Chicago, Illinois
- 2004-2009 Associate, Shen, Milsom & Wilke, LLC Chicago, Illinois
- 1998-2004 Arnold & O'Sheridan, Inc. Madison, Wisconsin
- 1995-1998 Hammel Green & Abrahamson, Inc. Minneapolis, Minnesota

Professional Certifications and Memberships

- AVIXA (InfoComm International), Certified Technical Specialist
- CTS-D
- AVIXA (Infocomm) Infrastructure Standards working group

Education

- Mass Communications, University Of Wisconsin Madison, Wisconsin
- Audio Recording and Production, Musicians Technical Training Institute Minneapolis, Minnesota.

- Portland Community College, Cascade Campus, Public Service Education Building, Portland, OR
- Oregon State University, Fairbanks Hall, Corvallis, OR
- North Eugene High School, Eugene, OR
- City of Ukiah, Council Chambers, Ukiah, CA
- Kaiser Permanente, North Lancaster Medical Office Building, Salem, OR

- Moreland Presbyterian Church, Sanctuary, Portland, OR
- Port of Vancouver, Commission Room, Vancouver, WA
- Clackamas Community College, Barlow Hall, Automotive, Oregon City, OR
- The University of Providence Great Falls, University Center, Great Falls, MT
- Central Michigan University, Center for Integrated Health Studies, Mount Pleasant, MI

- University of Montana, Early Childhood Education Center, Missoula, MT
- Muskegon Community College, Arts and Humanities, Theater Music and Art, Muskegon, MI
- South Christian High School, Grand Rapids, MI
- University of Oregon, Autzen Stadium, Eugene, OR



Peter Allen, PE Senior Engineer INCE Bd. Cert. pallen@abdengineering.com



Peter Allen is a senior acoustical engineer with a Master of Engineering degree in Acoustics and over 20 years of experience in the field of acoustics. Peter has been with ABD Engineering & Design since 2016 and provides consulting services on a wide-range of projects types, including education facilities, healthcare facilities, worship spaces, hotels, and multi-family housing, while also specializing in vibration testing and analysis.

Peter uses an evidence-based, data-driven approach to provide acoustical recommendations to clients. Whenever possible, his recommendations include multiple options to help clients meet their aesthetic and budgetary constraints. He has presented his work at various industry symposia as well as at the annual conference for the

Institute of Noise Control Engineering.

Prior to joining ABD, Peter worked as an acoustical consultant at Daly-Standlee & Associates for eight years, where he learned to apply his skills from a research environment to the field of acoustical consulting. He began his career at Southwest Research Institute (SwRI), where he worked for ten years. There, he managed technical projects in vibration analysis, noise control, and environmental testing for clients in the electric utility, telecommunications, aerospace, automotive, and building industries. He taught technical courses within the organization to further develop the skills of others in the organization.

In 2005, Peter obtained his Master's Degree of Engineering in Acoustics from Pennsylvania State University, and he has used his additional education to focus his efforts on the use of field testing and analysis to solve noise and vibration problems. In his personal time, Peter enjoys climbing, yoga, riding his motorcycle, and SCUBA diving.

Professional Experience

- 2016-Present Senior Acoustical Engineer, ABD Engineering & Design, Inc., Portland, Oregon
- 2008-2016 Senior Acoustical Engineer, Daly-Standlee & Associates, Portland, Oregon
- 1998-2008 Senior Research Engineer, Southwest Research Institute, San Antonio, Texas

Professional Licenses and Memberships

- Acoustical Society of America
- Institute of Noise Control Engineering (INCE), Board-Certified Member
- National Council of Acoustical Consultants
- State of Oregon, Professional Engineer #84392PE

Education

- Master of Engineering in Acoustics, Pennsylvania State University, State College, Pennsylvania, 2005
- · Bachelor of Science in Engineering, Electrical Emphasis, Texas Christian University, Fort Worth, Texas, 1998.

- Beaverton Health & Science School, Beaverton, OR
- · Jesuit High School, Portland, OR
- Kaiser Permanente:

 Hybrid Operating Room,
 Clackamas, OR
 - -Salmon Creek MRI, Vancouver,
 - -North Lancaster MOB, Salem, OR -Clackamas Eye Care MRI, Happy • Valley, OR
- · Lakeridge High School, Lake

- Oswego, OR
- Ron Russell Middle School, Portland, OR
- Tukes Valley K-8 School, Battlegreound, WA
- West End Surgical, Beaverton, OR
- Yates Pointe Mixed Use Development, Bend, OR
- Zoom+, Bridgeport Village Clinic, Portland, OR
- USANA Sciences

- Company,Packaging Area, Valley City, UT
- TriMet, Columbia 10, Portland, OR
- St John Fisher School, Gym Noise Isolation, Portland, OR
- Bendix, Relocation Noise and Vibration, Avon, OH



Jeremy Bielecki

Senior Acoustical Consultant jbielecki@abdengineering.com



Jeremy Bielecki is a Senior Acoustical Consultant with over 20 years of experience as a consultant, and as a project manager for over 300 building projects. Jeremy has worked in acoustics in the Midwest and Pacific Northwest on projects including healthcare, higher education, workplace, performance spaces, K-12 education, athletics, and multi-family residential.

Jeremy possesses a strong work ethic and creative problem solving skills that have served him and his clients well. Knowing he always wanted to be in engineering and involved with music, Jeremy found acoustics to be the marriage of the two. He gains tremendous satisfaction from being part of a project that starts with lines on a screen and words on a page, eventually becoming a physical space you live within, and get enjoyment from.

Over his career, Jeremy has developed expertise in performing field measurements, creating complex computer prediction models, and analyzing data and drawings to identify primary causes and contributors to noise and vibration problems. He also determines sound isolation ratings, HVAC system noise ratings, and room acoustic performance using reverberation time, acoustical clarity, and speech intelligibility metrics.

In his spare time, Jeremy is a skilled piano tuner and repair technician, musician, and coaches soccer and robotics. He also enjoys 3D printing, and cooking with his family.

Professional Experience

- 2022-Present Senior Acoustical Consultant, ABD Engineering & Design, Inc., Grand Rapids, Michigan
- 2005-2022 Acoustical Consultant, Kolano and Saha Engineers, Inc., Waterford, Michigan
- 2001-2004 Acoustical Engineer, Michael R. Yantis Associates, Inc., Seattle, Washington

Professional Memberships

- · Acoustical Society of America
- Institute of Noise Control Engineering (INCE)
- American Society of Testing and Materials
- National Council of Acoustical Consultants

Education

· Bachelor of Science in Mechanical Engineering, University of Michigan, Ann Arbor, 2000.

- Munson Medical Center Traverse City, MI
- *St. John Hospital, Detroit, MI
- *Detroit Pistons Performance Center, Detroit, MI
- *Greektown Casino Hotel, Detroit, MI
- *University of Michigan, Ann Arbor, MI Law School: Hutchins Hall, Jeffries Hall Student Union Central Campus Recreation Building Beyster Building Addition Munger Student Residences
- *Central Michigan University, Mount Pleasant, MI Grawn Hall Ronan Hall

- *Michigan State University, East Lansing, MI Broad Art Museum STEM Power Plant Renovation
- *Henry Ford Community College, Recording Studio, Dearborn, MI
- *Kendall College of Art and Design, Grand Rapids, MI
- *Davidson Foundation Development, Bloomfield Hills, MI
- Romeo High School, Auditorium, *Romeo, MI
- *Byron Center High School, Byron Center, MI
- *Ann Arbor School of the Performing Arts, Ann Arbor, MI
- *Toyota Technical Center, Quiet Room, Ann Arbor, MI

- *Charles H Wright Museum of African American History, Detroit, MI
- *Emagine Theaters, Royal Oak, MI
- *Residence Inn by Marriott, Grand Rapids, MI
- *Bharatiya Temple, Troy, MI
- *The Mid: Co-Living, Detroit, MI
- *New Beginning Baptist Church, Waterford, MI
- *Cobo Center, Detroit, MI
- *Patrick V. McNamara Fitness Center, Detroit, MI
- *Theodore Levin U.S. Courthouse, Detroit, MI





Benjamin Wolf is a Senior Acoustical Consultant with a Master of Science in Architectural Acoustics from Rensselaer Polytechnic Institute. He specializes in analysis and recommendations for the spaces and structures needed to provide acoustically effective and comfortable environments.

Ben joined ABD Engineering & Design, Inc. in 2016 after four years with Daly-Standlee & Associates. He has worked on architectural projects, including field testing of wall and floor/ceiling systems, HVAC noise analysis, the specification and design of acoustic partitions, and acoustical treatments in churches, movie theaters, offices, apartment buildings, hospitals, and schools. His environmental noise studies include mine and

quarry sites, light rail, highway and roadway noise, along with power and industrial facilities.

Ben uses 3D acoustic modeling software to provide a detailed analysis and recommendations for room acoustics, sound distribution, and speech intelligibility. As part of his master's thesis, he modeled accurate acoustical representations of several famous music performance venues allowing musicians to hear their performance simulated in those spaces, in real time, as if they were standing on stage.

In his spare time, Ben plays bass trombone with a wide variety of local groups. He enjoys web design and recording live sound.

Professional Experience

- 2016-Present Senior Acoustical Consultant, ABD Engineering & Design, Inc., Portland, Oregon
- 2012-2016 Acoustical Consultant, Daly-Standlee & Associates, Portland, Oregon

Professional Memberships

- Acoustical Society of America
- ASTM International, E33 Committee on Building and Environmental Acoustics
- Institute of Noise Control Engineering (INCE), Board-Certified Member
- National Council of Acoustical Consultants

Education

- Master of Science in Architectural Sciences, Emphasis in Architectural Acoustics, Rensselaer Polytechnic Institute, Troy, New York, 2012
- · Bachelor of Arts in Physics, Gustavus Adolphus College, St. Peter, Minnesota, 2011
- · Bachelor of Arts in Music Performance, Gustavus Adolphus College, St. Peter, Minnesota, 2011.

- South Cooper Mountain Apartments, Beaverton, OR
- Wood Village Mixed Use, Wood Village, OR
- Farmdale Apartments, North Hollywood, CA
- L&M Industrial Fabrication, Lot Expansion Barrier Calculations, Tangent, OR
- USANA Sciences Company, Packaging Area, Valley City, UT
- TriMet, Columbia 10, Portland, OR

- Hermiston Schools (Theater Lane Elementary School, Rocky Heights Elementary School, High School Classroom Annex and CTE), Hermiston, OR
- Dry Creek Landfill, Noise Study, Eagle Point, OR
- Kaiser Permanente, Sunnyside Medical Center, Clackamas, OR
- United Natural Foods, Noise and Vibration Study, Ridgefield, WA
- Threemile Canyon Farms, Generator Exhaust, Boardman, OR

- Northwest Pipe Company, Open Office Acoustics, Vancouver, WA
- Columbia Shores Townhouses, Overlay Noise Study, Vancouver, WA
- Wood Village Mixed Use, HUD Noise Study, Wood Village, OR
- Clackamas Federal Credit Union, Corporate Headquarters, Oak Grove, OR



Quincey Smail Senior Acoustical Consultant INCE Bd. Cert. qsmail@abdengineering.com



QUINCEY SMail is a Senior Acoustical Consultant, with a Master of Engineering in acoustics from Penn State. Quincey's expertise includes acoustical design, modeling and testing to provide thoughtful recommendations for a variety of project types from residential and mixed use to K-12, higher education to healthcare, workplace, environmental, and industrial facilities. Quincey earned his Board Certification by the Institute of Noise Control Engineering (INCE) in 2022.

His projects include noise studies of manufacturing equipment in the US and Europe, car wash sites with residential adjacencies, and high-profile commercial locations. Quincey's musical background has served him and his projects well in performance

spaces including the Interlochen Center for the Arts, as well as other public and private music schools, music stores, event centers, plus the particular needs of worship spaces. Quincey is regularly called upon to assist with hotel acoustical needs during design and construction, along with post-occupancy needs. He has also worked with hospitals, hospice, counseling centers, dental offices, and residential healthcare to address FGI and HIPAA requirements.

In his free time, Quincey – a talented baritone – sings in community and church choirs. He can be found enjoying the Grand Rapids local craft-brewery and cocktail culture, trivia nights, and playing tabletop games.

Professional Experience

- 2016-Present Senior Acoustical Consultant, ABD Engineering & Design, Inc., Grand Rapids, Michigan
- 2015-2016 Lead Producer, Penn State University, State College, Pennsylvania
- 2012-2013 Physics Lab Assistance, Central College Physics Department, Pella, Iowa

Professional Memberships

- · Acoustical Society of America
- American Society of Testing and Materials
- National Council of Acoustical Consultants
- Institute of Noise Control Engineering (INCE), Board-Certified Member
- Boy Scouts of America, Eagle Scout

Education

- Master of Engineering in Acoustics, Pennsylvania State University, State College, Pennsylvania, 2016
- Bachelor of Arts in Physics, Minors in Mathematics, Music, and German, Central College, Pella, Iowa, 2013.

- Public Museum, Grand Rapids, MI
- Courtyard Marriott, Detroit, MI
- Essity Operations Gennep, Netherlands
- Tri County Area Schools, Cafetorium, Howard City, MI
- Nestle Production Studio, Solon, OH
- Bendix, Relocation Noise and Vibration, Avon, OH
- Western Michigan University, Dunbar Hall, Kalamazoo, MI
- Western Michigan University, College of Aviation, Battle Creek, MI

- Riverview Church, Auditorium, Holt, MI
- 212 River Residential Mixed-Use, Holland, MI
- Jefferson Lofts Condominium Association, Noise Isolation, St. Joseph, MI
- West Ottawa Public Schools, Performing Arts Center, Holland, MI
- Warner Norcross & Judd, Office Acoustics, Detroit, Grand Rapids, and Kalamazoo, MI
- Tommy Car Wash Systems, Car Wash Noise Study, Hudsonville and Flint, MI

- Forslund Condominium, Impact Isolation, Grand Rapids, MI
- Domino's Pizza, Boardroom and Warehouse Open Office, Ann Arbor, MI
- Interlochen Center For The Arts, Kresge Amphitheater, Interlochen, MI
- Grand Valley State University, Product Design and Robotics Studio, Grand Rapids, MI
- Ford Motor Company, Conference & Event Center, Dearborn, MI
- Opera Grand Rapids, Grand Rapids, MI





IVA Handley is a graduate of Rosenheim University of Applied Sciences in Germany, where she earned her bachelor's degree in engineering, with a focus on interior engineering.

Iva has since worked as an engineer in the building design field, both in Germany, and in the US. She is experienced in acoustical measurements of airborne sound, impact noise, equipment, construction, and traffic noise, as well as building enclosures and field reviews. She also brings a background in carpentry and metal work to her projects.

When Iva isn't out taking acoustical measurements, building acoustical room models, or writing engineering reports, you might find her brewing her own beer.

Professional Experience

- 2019-Present Acoustical Consultant, ABD Engineering & Design, Inc., Portland, Oregon
- 2018-2019 Building Science Engineer, EIT, RDH Building Science, Inc., Portland, Oregon
- 2015-2016 Project Engineer, ig-bauphysik GmbH & Co. KG, Hohenbrunn, Germany

Education

- Bachelors of Engineering: Interior Engineering, FH Rosenheim: University of Applied Sciences (Germany), 2017
- Study Abroad Program, École Supérieure du Bois: Research Wood Science and Technology (France), 2014

Professional Certifications

EIT Certification for Civil Engineering and Land Surveying in the State of Oregon

Professional Memberships

- · Acoustical Society of America
- Institute of Noise Control Engineering (INCE)
- American Society of Testing and Materials
- National Council of Acoustical Consultants

- Zoom+, Bridgeport Village Clinic, Portland, OR
- Hillsboro School District, Mooberry Elementary School, Chiller Noise, Hillsboro, OR
- Godfrey Detroit Hotel, Detroit, MI
- Schirle Elementary School, Salem, OR
- Treasury Resiliency Building, Salem, OR
- Victory Charter School, Performing Arts Center, Nampa, ID
- Hermiston Schools (Theater Lane Elementary School, Rocky Heights Elementary School, High School Classroom Annex and CTE), Hermiston, OR

- Chiller Noise Control, Portland, OR
- Oregon Humane Society, Portland, OR
- Kaiser Permanente, Sunnyside Medical Center, Clackamas, OR
- United Natural Foods, Noise and Vibration Study, Ridgefield, WA
- Sprague High School, Salem, OR
- Northwest Pipe Company, Open Office Acoustics, Vancouver, WA
- Legacy Health, Emanuel Medical Center and Progressive Cardiac Care Unit, Portland, OR
- Casino Road Office Building, Everett, WA

- Oregon State University
 Cascades, AB2 STEM Building,
 Bend, OR
- Silco Site Apartments, Portland, OR
- Kaiser Permanente, North Lancaster Medical Office Building, Salem, OR
- University of Portland, Innovation Center, Portland, OR
- Salem-Keizer Public Schools, South Salem High School, Salem, OR
- Scioto Peninsula Apartments, Columbus, OH





JOhn Kramer is an acoustical consultant, with a Master of Architectural Engineering from University of Nebraska, Lincoln. John's passion for music and performing arts led to his interest in acoustics and helping to create efficient, comfortable, and healthy acoustical environments. John leverages his experience in acoustics and building systems with an applied background in noise and vibration control in his project work.

John has excelled with both professional and student design teams, including a 1st place finish in the 2020 ASHRAE Student Design Competition (System Selection). He has designed mechanical systems on projects including secure government facilities,

corporate headquarters, large scale healthcare, and education. Since joining ABD, John has begun working on projects across the country from wind turbine noise studies to residential acoustics. John is building his experience with acoustically sensitive spaces including: Healthcare, K-12 Schools, Churches, Corporate Offices, and Social Halls, and is quickly developing as a consultant.

In John's spare time he enjoys playing guitar and singing, playing chess, collecting comic books, and is learning his way around West Michigan.

Professional Experience

- 2021-Present Acoustical Consultant, ABD Engineering & Design, Inc., Grand Rapids, Michigan
- 2019-2021 Mechanical Engineering Intern, HDR, Omaha, Nebraska

Professional Memberships

- Acoustical Society of America
- Institute of Noise Control Engineering (INCE)
- American Society of Testing and Materials
- National Council of Acoustical Consultants

Education

- Master of Architectural Engineering, University of Nebraska, Lincoln, NE, 2021.
- Bachelor of Science of Architectural Engineering, University of Nebraska, Lincoln, NE, 2020.

- Oregon State University Fairbanks Hall Corvallis, OR
- Minot State University Hartnett Hall Minot, ND
- Sinclair Community College Distance Learning Dayton, OH
- Grand Rapids Community College Secchia Institute for Culinary Education Grand Rapids, MI
- Oregon Health and Science University Dispatch Portland, OR

- Corewell Health Ambulatory Grand Rapids, MI
- PeaceHealth Riverbend Springfield, OR
- Portland Providence Medical Center Main Emergency Department Portland, OR
- Interlochen Center for the Arts Interlochen, MI
- Jackson Hole Classical Academy New High School Jackson Hole, WY
- Hudsonville Christian School Hudsonville, MI
- Wheaton Academy West Chicago, IL

- Kellogg's Headquarters Battle Creek, MI
- LinkedIn Detroit Detroit, MI
- Disability Advocates of Kent County Grand Rapids, MI
- Wolverine Worldwide Broadcast Studio Rockford, MI
- Cannon Muskegon Noise Study Muskegon, MI
- Grand Rapids Public Museum Grand Rapids, MI
- Southtown Guitar Grand Rapids, MI



Faulkner Bodbyl-Mast, CTS Audiovisual & Acoustical Consultant fbodbylmast@abdengineering.com



Faulkner Bodbyl-Mast is an audiovisual and acoustical consultant, having earned a bachelor's degree in Sound Engineering, with a minor in Electrical Engineering. Faulkner is an AVIXA Certified Technical Specialist (CTS). You might work with him in either or both capacities at ABD.

Faulkner's interest in sound came from his passion for music. He started attending Grand Rapids Symphony Orchestra concerts as a child and developed as an instrumentalist through grade school and high school, picking up the euphonium and carrying it into college. Once exposed to electronic music, Faulkner's interest shifted from performance to technical arts. He combined his early musical training with technology and blossomed into composing, recording, and music production. Faulkner provided sound design for live theater productions and began 3D sound modeling to

create sound design for video games.

Acoustics and AV go together, as the inherent quality of the built environment is designed and tuned by engineering and supported and enhanced by the electronics. Faulkner notes the acoustics of a space and systems within it must compliment each other or they will undermine each other.

Aside from his work in acoustics and audiovisual design, Faulkner is passionate about music. Gifted in composing, performing, and recording electronic pieces, you might find his compositions on SoundCloud.

Professional Experience

- 2022-Present Audiovisual & Acoustical Consultant, ABD Engineering & Design, Inc., Grand Rapids, Michigan
- 2022 Acoustical Intern, Kirkegaard, Chicago, Illinois
- 2019-2022 Media Assistant, Duderstadt Center, Ann Arbor, Michigan
- 2019-2022 Audio Director, Composer, Sound Designer, Wolverine Soft Studio, Ann Arbor, Michigan

Professional Memberships and Certifications

- AVIXA (InfoComm International), Certified Technical Specialist
- CTS
- Audio Engineering Society
- American Institute of Architects, Professional Affiliate
- National Council of Acoustical Consultants

Education

 Bachelor of Science in Sound Engineering, minor Electrical Engineering, University of Michigan, Ann Arbor, 2022.

Project Experience

- Hope College
 Dewitt Center for Economics and
 Business, Holland, MI
- Oregon State University Fairbanks Hall Corvallis, OR
- Oregon State University Student Success Center Corvallis, OR
- Columbia Gorge Community College Nursing SIM Lab The Dalles, OR
- Hillsboro Civic Center Hillsboro, OR
- Chehalem Cultural Center Newberg, OR

- City of Troy Council Chambers Troy, MI
- Portland Art Museum Rothko Pavilion, Portland, OR
- Rogue Credit Union Community Complex Sports and Events Medford, OR
- Wheaton Academy West Chicago, IL
- St Paul Center Steubenville, OH
- Ben Davis High School Indianapolis IN
- Potter Elementary School Flint, MI
- Illiana Christian High School Lansing, IL

- Amity Middle School and High School Amity, OR
- Spokane Pubic Schools Lewis and Clark High School Spokane, WA
- NAMI Oregon Portland, OR
- Peace Church Middleville, MI
- Gardens of Sun City Senior Living, Sun City, AZ
- Senior Living Peoria AZ
- Happy Valley Library Happy Valley, OR

ABD Engineering & Design



Lauren Slattery is an acoustical consultant newly located in Portland, OR. She is a graduate of Belmont University where she earned her bachelor's of science degree in Audio Engineering Technology, with a Physics minor.

Lauren comes to ABD Engineering & Design directly from her internships at NASA Ames Research Center and NASA Marshall Space Flight Center, where she performed acoustical testing and assisted with acoustical aspects of aircraft, satellites, engines, and their components. Lauren is building her architectural acoustical experience through mentoring with ABD staff. She is proving to be a quick study and is taking on her own project work.

Lauren describes herself as outdoorsy and enjoys hiking, climbing, and kayaking. She loves road trips and travel, reading, and baking - especially pastries.

Professional Experience

- 2024-Present Acoustical Consultant, ABD Engineering & Design, Inc., Portland, Oregon
- 2024 Acoustic Support Intern, NASA Ames Research Center, Mountain View, California
- 2023-2024 Acoustic Test Support Intern, NASA Marshall Space Flight Center, Huntsville, Alabama
- 2021-2024 Audiovisual Technician, Columbus Zoo and Aquarium, Columbus, Ohio
- 2022 School of Music Audio Crew, RF Technician, Stagehand, Belmont University, Nashville, Tennessee

Education

• Bachelors of Science: Audio Engineering Technology, Physics Minor: Belmont University, Nashville, TN, 2023

Professional Certifications

- ProTools User Certified
- Dante Certification 3

Professional Memberships

- Audio Engineering Society
- Women in Audio
- · Acoustical Society of America
- Institute of Noise Control Engineering (INCE)
- American Society of Testing and Materials
- National Council of Acoustical Consultants

- Oregon State University Corvallis, Magruder Hall, Corvallis, OR
- Sous La Rose Social Club and Event Space, Portland, OR
- Micronesian Islander Community's Voyagers' Village, Affordable Housing, Salem, OR
- Colonia de Valle Prospero, Affordable Housing, Albany, OR
- RogueX Credit Union Community Complex, Aquatics, Sports, and Events Center Medford, OR
- Acoustic Test Stand Design, Mountainview, CA
- Wind Tunnel Acoustic Data Processing, Mountainview, CA
- Ocean Way Recording Studios, Final Recording Project for Studio Recording II Nashville, TN
- Foley and ADR group recording project Nashville, TN



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