

# JEFFREY BROWN

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## SUMMARY OF QUALIFICATIONS

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- Executive Management
- Operations Management
- Project Management
- Business Development
- Client & Customer Management
- Strategic Planning
- Product Development Management
- Accident Reconstruction
- Research and Development
- Design Transfer to Manufacturing
- Business Accounting
- Business Process Improvement
- cGMP Manufacturing
- Design of Experiments
- Project Scoping & Estimating
- Tissue/Cell/Protein Isolation
- ISO 9001 & 13485
- 21CFR 820/1271/211
- Process Engineering
- ERP (Epicor, Alliance)
- Design Controls
- Quantitative Methods
- Resource Planning and Recruiting
- Risk Management & CAPA

## WORK EXPERIENCE

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Compass Consulting Engineers | Westminster, CO | 2023- Present

*Compass is a forensics engineering firm providing professional accident reconstruction services and expert testimony*

### Business Manager and Senior Scientist

- Oversee recruiting, employee training and development, and human resources
- Manage company financials including budget, bookkeeping, tax oversight, client invoicing and accounts receivables, and assets
- Lead business development efforts including marketing, technical/CLE presentations, website and digital marketing
- Assist ownership with strategic planning
- Conduct forensic investigations, reports, and testimony for medical device failures/incidents
- Consult and conduct CLE training on regulatory affairs / quality assurance (RA/QA) and design/manufacture of medical devices and biologics

Essent Biologics | Centennial, CO | 2021- 2023

*Essent was a subsidiary of AlloSource, specializing in CDMO services and provision of human cells, scaffolds and tissue products*

### Vice President, Research & Development

- Shaped, planned and oversaw the execution of the technological vision and strategy
- Spearheaded Business Development opportunities including potential client outreach, collaborations with military/industry/academia, & external funding with domestic & international partners
- Managed personnel, material, equipment, projects & budget for R&D team
- Developed CDMO and PMO arms of the business, writing & successfully securing statements of work totalling over \$1M in first two years
- Successfully developed, design-transferred & commercially launched six human cell & matrix products
- Managed all aspects of Intellectual Property

Essent Biologics/AlloSource | Centennial, CO | 2018- 2021

*AlloSource is a mission-based human tissue bank which manufactures hundreds of allograft products for implantation*

### Sr. Innovation Scientist

- Technical Lead for all research and development efforts
- Supported futuring efforts and founded Essent Biologics subsidiary company
- Designed, executed and analyzed scientific studies for product development and process improvement.
- Created and managed internal projects for development multiple cellular & biomaterial products from concept to design transfer and launch
- Advanced customer relations and generated revenue by writing and executing statements of work

- Wrote and submitted grants with various military, academic and industry partners
- Prepared technical articles, protocols, and scientific studies in support of strategic licensing and acquisition opportunities
- Managed all material and human resources in the Research and Development department including budget and staffing

Evergreen Research, Inc. | Golden, CO | 2014 - 2018

*Evergreen Research is a fast-paced contract medical device design, development and manufacturing company with internal RA/QA support that specializes in complex electro-mechanical systems and sterile disposables from prototyping through production*

### **Operations Manager**

- Managed 15-person team of buyers, material handlers, technicians, assemblers and engineers to maintain a 95% on-time delivery record for electromechanical equipment & sterile disposables
- Maintained Device Master Records and Device History Records for 60+ medical devices & spares
- Managed 15+ development, manufacturing and service projects
- Generated statements of work and product transfer prices resulting in sales of \$1 M+/year
- Managed the procurement, handling and accounting of \$4.5M in controlled inventory
- Managed customers/clients including price negotiation, invoicing and AR
- Assisted in month-end and year-end books reconciliation and double-entry accounting
- Assessed performance including promotions, PIPs and annual/off-cycle evaluations
- Defined recruiting needs through FTE planning, led recruiting efforts and oversaw staff training
- Company trainer for design transfer to manufacturing, MRP and engineering change orders
- Wrote/compiled presentation and presented at monthly staff meetings
- Assisted in outside audits by notified body, clients and safety agencies

### **Mechanical Design Engineer/Project Manager**

- Created/revised solid models and drawings using SolidWorks and PDM
- Led or assisted with creating and maintaining the Design History File including architecture, planning and requirements, design, risk assessment, and IOVV for multiple devices
- Generated and released bills of material, component specifications/detail drawings, assembly procedures/drawings, fixtures and functional tests
- Developed ingestible diagnostics, cast-setting accessories, and developed/sustained the device master record for an ultrasound eye-imaging device and a subdermal RF-heating/tissue reorganization device
- Project Management and Design transfer to manufacturing activities for several products

Tufts University | Medford, MA | 2007 - 2013

*Biomedical Engineering Department with specialization in musculoskeletal tissue engineering and biomaterials*

### **Biomedical Research Fellow**

- Young Researcher of the Year, *International Symposium on Ligaments & Tendons 2011*
- Developed, built and optimized a prototype device for generating cell/biologic/drug-embedded nanofiber/hydrogel composite scaffolds, *patent USSN 61/825, 191 filed May 2013, Brown JP et al.*
- Constructed a LabView-controlled mechanical loading bioreactor for cells and tissues, enabling mechanotransduction research that expanded the laboratory capabilities and led to numerous journal and conference publications

Johnston Engineering | Scottsdale, AZ | 2003 – 2007

*Mechanical engineering systems design company specializing in new and renovation plumbing, HVAC, & energy savings projects*

### **Lead Mechanical Engineer**

- Successfully planned and executed 50+ design for construction projects for mechanical systems including HVAC, hydronic and plumbing systems under budget and with 100% regulatory conformance
- Reduced over \$100,000/year aggregate operating costs for client by analyzing existing mechanical systems and building envelopes and implementing state-of-the-art upgrades
- Expanded business scope by serving as a mechanical expert consultant for forensic investigations

NEI Electric Power Engineering | Arvada, CO | 2001-2002

### **Project Manager (Contract)**

- Assisted in management of multimillion electrical system renovation at a waste water treatment plant

United States Navy | Aircraft Carrier U.S.S. Abraham Lincoln | 1996-2001 | Honorable Discharge

### **Nuclear Training Officer**

- Increased test scores by 15% for 400-person Reactor Department by designing and implementing novel training techniques and a personalized performance tracking system

### **Chemistry & Radiological Controls Officer**

- Early promotion following peer-led campaign due to superior performance managing a 15-person division including budget, training, promotion, equipment maintenance and procurement
- Ensured the operational readiness of the ship by maintaining the chemistries of two nuclear and steam plants and personnel radiation exposure in strict accordance with US, USN & international regulations

### **Nuclear Engineering Plant Operations Officer**

- Ensured operational readiness by leading a 15-person operations team that controlled a reactor plant and all auxiliaries including main propulsion, electrical and water generation/distribution

## **EDUCATION**

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Ph.D. | Biomedical Engineering, *Tufts University, Medford, MA*

M.S. | Bioengineering, *Arizona State University, Tempe, AZ*

B.S. | Marine Engineering Systems, Magna Cum Laude, *U.S. Merchant Marine Academy, Kings Point, NY*

## **AWARDS, PUBLICATIONS & CERTIFICATIONS**

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- Outstanding Contribution to Undergraduate Education, 2010, Tufts University School of Engineering
- Chair of Biomedical Engineering Academic Fellowship, 2008, Tufts University School of Engineering
- Young Researcher of the Year Award, *International Symposium on Ligaments and Tendons*, 2011
- Surface Warfare Officer Qualified, 2000, USS Abraham Lincoln
- Engineering Officer Qualified, 2000, Naval Reactors, Washington D.C., *highest possible evaluation*
- Navy Achievement Medal for Outstanding Engineering Instructor, 2001, USS Abraham Lincoln
- Navy Achievement Medal for Outstanding Project Manager, 1999, USS Abraham Lincoln
- Brown JP *et al.* "Elastogenic Protein Expression of a Highly Elastic Murine Spinal Ligament: The Ligamentum Flavum," *PLoS ONE* 7(6): e38475 (2012)
- Brown JP *et al.* "Embryonic Mechanical and Soluble Cues Regulate Embryonic Tendon Cell Gene Expression as a Function of Developmental Stage and Anatomical Origin," *J. Biomechanics* 47(1): 214-22 (2014)
- Brown JP *et al.* "Comparing the Responses of Murine Mesenchymal Stem Cells and Tenogenically Differentiating Cells to Embryonic Developmental Factors," *Stem Cell Research & Therapy* 6(1): 89 (2015)
- Patents for novel electrospinning method and biological solutions for regenerative medicine