

CORPORATE LEADERSHIP

CEO | RegenX
VP Eng. | RomTech
CSO | 206 Ortho
CSO | Oxford Perf. Materials
CEO | Medtexel
CTO | Tavers Technology
CEO | Thin Client Corp.

CORP. ADVISORY ROLES

ROM3/RomTech/Rehab2Fit
Fortify
206 Ortho
Oxford Perf. Materials
Stemnion
DAOS

ACADEMIC LEADERSHIP

Faculty | Harvard Medical School

Principal Investigator | Massachusetts General Hospital

EDUCATION & TRAINING

Post-Doctoral Fellow | Brigham and Women's Hospital, Harvard University

Post-Doctoral Fellow | Montreal General Hospital and McGill University

Doctorate | Biomedical Eng., McGill University

Masters | Biomedical Eng., McGill University

Bachelor of Science, Honors | Life Science, Queen's University

SKILLS SUMMARY

Biomaterials development
Preclinical testing
Technology development
Recruiting & managing KOLs
Regulatory and Quality
IP strategy
Leading technical personnel
Working with surgeons

PROFILE OVERVIEW

I am an accomplished researcher, innovator and engineer with an established record of executive leadership, technology development & commercialization.

I have been fortunate to spend much of my 25-year career at the intersection of biology, medicine and engineering. I am the founder of 2 companies and have held C-level positions at 4 other medical start-ups.

Over my career I have collaborated and worked closely with clinicians and surgeons in both academic and commercial capacities at world leading institutions. From 2010-2014 I was a faculty member at Harvard Medical School and a Principal Investigator in the Department of Orthopedics at the Massachusetts General Hospital.

In organizations large and small, I have proven to be highly effective as a leader, innovator and problem solver. I enjoy working at a fast pace on multiple projects and, as I hope that my career demonstrates, I am driven to succeed and deliver. I lead with a strong sense of purpose and urgency. I'm never satisfied with the status quo, am well equipped to lead change, drive innovation and inspire others to do the same. I take great personal interest in developing my staff and am delighted to see them grow and succeed.

Leadership Expertise

Recruiting, leading and developing high-performing teams.
Working and leading across disciplines (scientific, medical, technical and business).
Ability to successfully lead teams through ambiguous and complex challenges.
Leading and motivating in high-pressure environments.

Business Expertise

Start-ups - medical device / medical technology / biotech.
Compressing timelines and budgets.
Driving innovation and development.
Identification, development, and protection of intellectual property.
Identifying and overcoming key impediments in technology development.

CORPORATE LEADERSHIP ROLES

CEO & Cofounder, RegenX **2019 - present**
RegenX is developing novel collagen-based therapies for a number of different markets.
Identified key initial target markets and funding strategy.
Planned, led and performed preclinical studies
Raised \$520k in non-dilutive peer reviewed funding from DoD, NSF and Northeastern.
Successfully negotiated licensing deal with Northeastern.
Recruited KOLs, advisors and key hires (2 from Harvard Medical School).
Led and performed all *in vivo* studies.
Setup and equipped new research laboratory.
Conceived and developed specialized equipment to accelerate materials testing.

Vice President Engineering, ROM3/ROMTech **2018 - 2020**
Napkin sketch to production of 60 units for clinical testing in 18 months.
Led all development efforts for ROM3 rehabilitation system (bike, force sensing pedals, wearables, hardware, goniometer, software, cloud-based management system).
Recruited and built team of 35 (software, hardware, mechanical, initial production).

Located and established development facility.
Oversaw acceptance of compliance testing.
Hand-off to manufacturing @ 20 months.
Nine (9) patents filed for innovations in software, hardware and patient wearables.

Principal, Langholm Consulting

2015 - 2019

Langholm consulting (LC) provided broad services for companies and investors in the medical device/bio-materials sector. LC provided complete end-to-end preclinical testing and analytical services. Provided due diligence for investors and 3rd parties (objective assessment of IP, technology, preclinical study results, scientific plans and scientific staff). LC developed/refined product strategy, scope, IP strategy and scientific strategy. Clarified path for device/technology development, identified technical and scientific obstacles, presents alternatives and contingencies. Review/overview/oversight of pre-clinical testing for FDA submission.

Chief Scientific Officer, 206 Ortho

2015*

Led R&D, preclinical and scientific strategy for fracture fixation devices.
Designed, conducted and completed large animal studies.
Developed and implemented strategy for FDA clearance.
Developed and implemented strategy, rationale and direction for preclinical studies.
Prepared investor documents and key white papers.

* Company ran out of funds in 2015 leading to my resignation

Chief Scientific Officer, Oxford Performance Materials

2014 - 2015

Led R&D, preclinical and scientific strategy. Led the development and commercial rationale of 3D printed polymeric devices for orthopedic reconstruction. Developed new technology and intellectual property (foundation technology for large and small joint arthroplasty using direct drug delivery). Conceived, wrote and awarded NIH grant based on technology I developed. Integral member of corporate fundraising team, support for IPO (abandoned).

Led and established a multi-year, 10 project, 8-investigator collaboration with Yale University.

Awarded NIH grant "*Load Bearing 3D Printed Implants for Antibiotic, Cell and Growth Factor Delivery*"

Lead inventor, patent [US20160166284A1](#) for load-bearing porous 3D printed surfaces for drug delivery.

Designed, conducted and completed numerous large animal preclinical studies.

Guided marketing and scientific materials for physician education.

Scientific lead for investment roadshow

Founder and Chief Executive Officer, Thin Client Corp.

2000 - 2006

ThinClient developed a Palm pilot and web-based information management systems for medical residency training programs.

Developed HIPAA compliant, data-driven web and Palm Pilot based system.

Worked closely with program directors (surgeons) to expand and refine system.

Used by 15 residency programs across Canada and the US, logged >40,000 cases.

CORPORATE ADVISORY ROLES

Business Advisor, Fortify (3D Printing)

2016 - 2017

Provided executive level guidance to company founders. Help founders explore strategy as it relates to positioning, partnerships and capital raises.

Scientific Advisor, 206 Ortho (Minimally invasive fracture fixation)

2014 - 2015

Advised research strategy and evaluation of materials for resorbable minimally invasive fracture fixation.

Scientific Advisor, Oxford Performance Materials (3D Printing)

2013 - 2014

Led and advised research evaluating 3D printed polymer for orthopedic implants.

Scientific Advisor, Stemnion (Amnion derived stem cells for tissue regeneration)

2011 - 2013

Advised and led research evaluating amnion derived stem cells and biologics for orthopedic applications.

ACADEMIC LEADERSHIP ROLES

Faculty, Harvard Medical School (2010-2014)

Trained and taught visiting faculty, clinicians, researchers, residents and fellows on topics related to orthopedic biomaterials, orthopedic issues and new research approaches. Research areas included:

Development of new methods to treat diseases and injuries of the musculoskeletal system (Tissue Eng., stem cells, regenerative medicine, bone grafts, biomaterials, implants).

Study the interaction between cells, tissues, biologics and biomaterials *in vivo* and *in vitro*.

Optimization of allograft and autograft materials for healing of large bone defects

Methods to reduce implant infection.

Principal Investigator, Dept. of Orthopedics, Massachusetts General Hospital (2010-2014)

Laboratory for Musculoskeletal Research and Innovation

Established new laboratory in the department of orthopedics focused on device related infections, biomaterials, bone regeneration and fracture healing.

Formed and led industrial collaborations with partners on new materials and technology

Conceived, led and managed 15 collaborative research projects with clinical faculty (tissue engineering, bone formation, allograft, implant infection, growth factors).

Raised over \$2 million in peer reviewed funding (NIH, OREF, ERDF, CIHR).

Established local and international collaborations (within the department, Harvard, Boston and internationally - Canada, France, Finland, Italy).

Recruited, hired and supervised 24 PDF's, graduate students and undergraduates.

PATENTS, PUBLICATIONS AND PRESENTATIONS

Published work cited more than 2600 times

10+ issued and pending US and international patents.

40+ scientific publications.

50+ invited lectures at international conferences, universities and industry events.

200+ presentations at international conferences, universities and industry events.

PROFESSIONAL ACTIVITIES AND COMMUNITY SERVICE

Supervised 47 students (undergraduates, medical students, medical residents, masters and PhD students [not primary supervisor], post-doctoral fellows)

Lead chapter author, "Cells and Surfaces In Vitro", Biomaterials Science, 3rd and 4th editions

Grant reviewer (CIHR, ORF, EPSR, AO Group)

Raised over 4 million in funding from NIH, NSF, DoD, CIHR, Industry, CIMIT, ERDF, Academy of Finland

Mentor and Judge at [MassChallenge](#)