Working with Industry

Todd Keiller- Director, IP and Technology Transfer

9/24/25

Why Work with Industry?

- Strategic Plan – find alternative sources of income
- Focused collaboration that matches/compliments skills
- Can lead to a commercial pathway that will help patients
- Can generate funds for CORE facilities

Some tips

Some Tips

- Need to qualify the partner
  - Can we satisfy what they actually need?
  - Can we do the work in the timeframe they need?
  - Can they pay?

Some Tips

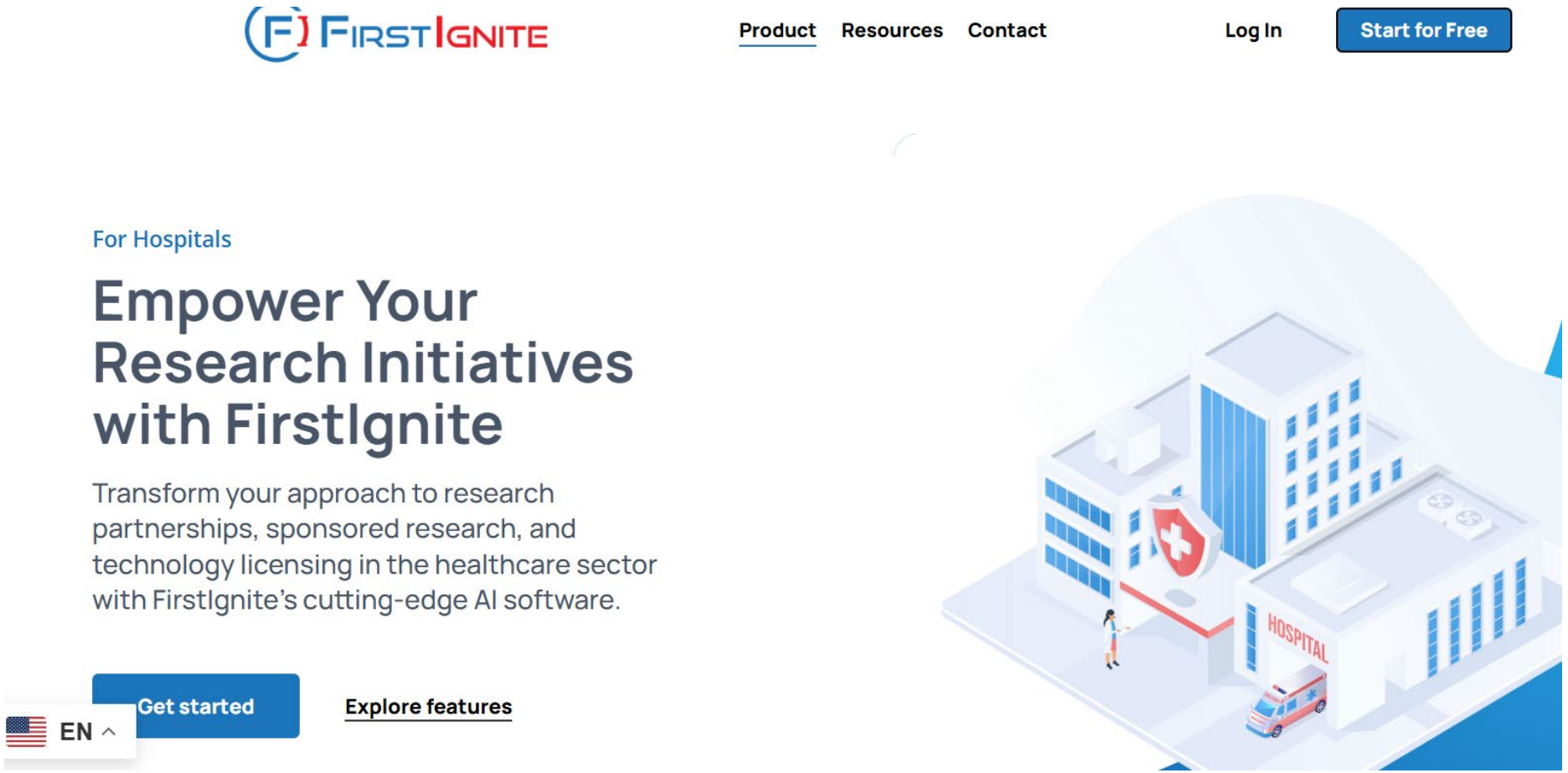
- **NABC**

- What unmet **N**eed are we solving for them?
- How will we **A**pproach satisfying that need?
- What is the **B**enefit of working with us?
- Who is the **C**ompetition and why are we better?

Some Tips

- Mindset change when it comes to budgeting
- Work out the scope of work (needs to be very clear!)
- Determine the direct and indirect costs
- Present just the **total cost,** the expected outcomes and the timeframe

First Ignite AI Platform



First Ignite Uses

- Find Licensees
- Find Sponsored Research collaborators
- Find Foundations
- Find Investors
- Find customers for your CORE/Lab

Process – input

SPECIFIC AIMS

Obesity is a global pandemic, exacerbating type 2 diabetes mellitus (T2DM), cardiovascular disease, fatty liver, and certain cancers[1]. Despite significant progress with anti-obesity medications[2], such as glucagon-like peptide-1 receptor agonism, weight loss/bariatric surgery remains integral to the clinical management of severely obese patients. Vertical sleeve gastrectomy (VSG) is the most common procedure, which involves removal of a significant portion of the stomach. Bariatric surgery can reduce 60-70% of excess body weight within 18-24 months, with striking ameliorative effects on T2DM[3,4]. Unfortunately, adverse side effects of bariatric surgery include bone loss with increased fracture risk[5-7], which is also observed in other conditions requiring gastrectomy, such as stomach cancer[8]. Current treatments focus on correcting nutritional deficiencies and monitoring bone mineral density in high-risk patients[6]. However, our research suggests that the cause of post-VSG bone loss goes beyond nutritional deficiencies and mechanical unloading[9]. Therefore, understanding VSG-induced bone loss is essential, as these insights may help to identify novel therapeutic targets.

ORIGINAL ARTICLE

Obesity Biology and Integrated Physiology

Interindividual differences of dietary fat-inducible *Mest* in white adipose tissue of C57BL/6J mice are not heritable

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Abstract

Objective: Differences in white adipose tissue (WAT) expression of mesoderm-specific transcript (*Mest*) in C57BL6/J mice fed a high-fat diet (HFD) are concomitant with and predictive for the development of obesity. However, the basis for differences in WAT *Mest* among mice is unknown. This study investigated whether HFD-inducible WAT *Mest*, as well as susceptibility to obesity, is transmissible from parents to offspring.

Methods: WAT biopsies of mice fed an HFD for 2 weeks identified parents with low and high WAT *Mest* for breeding. Obesity phenotypes, WAT *Mest*, hepatic gene expression, and serum metabolites were determined in offspring fed an HFD for 2 weeks.

Results: Offspring showed no heritability of obesity or WAT *Mest* phenotypes from parents but did show hepatic and serum metabolite changes consistent with their WAT *Mest*. Importantly, retired male breeders showed WAT *Mest* expression congruent with initial WAT biopsies even though HFD exposure occurred early in life.

(12) **United States Patent**
Brooks et al.

(10) **Patent No.: US 11,998,600 B2**
(45) **Date of Patent: *Jun. 4, 2024**

(54) **ENHANCING THE THERAPEUTIC ACTIVITY OF AN IMMUNE CHECKPOINT INHIBITOR**

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(73) Assignee: **MaineHealth**, Scarborough, ME (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 96 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **17/110,543**

(22) Filed: **Dec. 3, 2020**

(65) **Prior Publication Data**

US 2021/0100901 A1 Apr. 8, 2021

Related U.S. Application Data

(63) Continuation of application No. 15/169,863, filed on Jun. 1, 2016, now Pat. No. 10,881,732.

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Sosman et al. Clinical Activity and Safety of Anti-Programmed Death-1 (PD-1) (BMS-936558/MDX-1106/ONO-4538) in Patients (PTS) with Advanced Melanoma (MEL). Abstract 11090. Annals of Oncology 23 (Supplement 9): ix361-ix375, 2012. (Year: 2012).*

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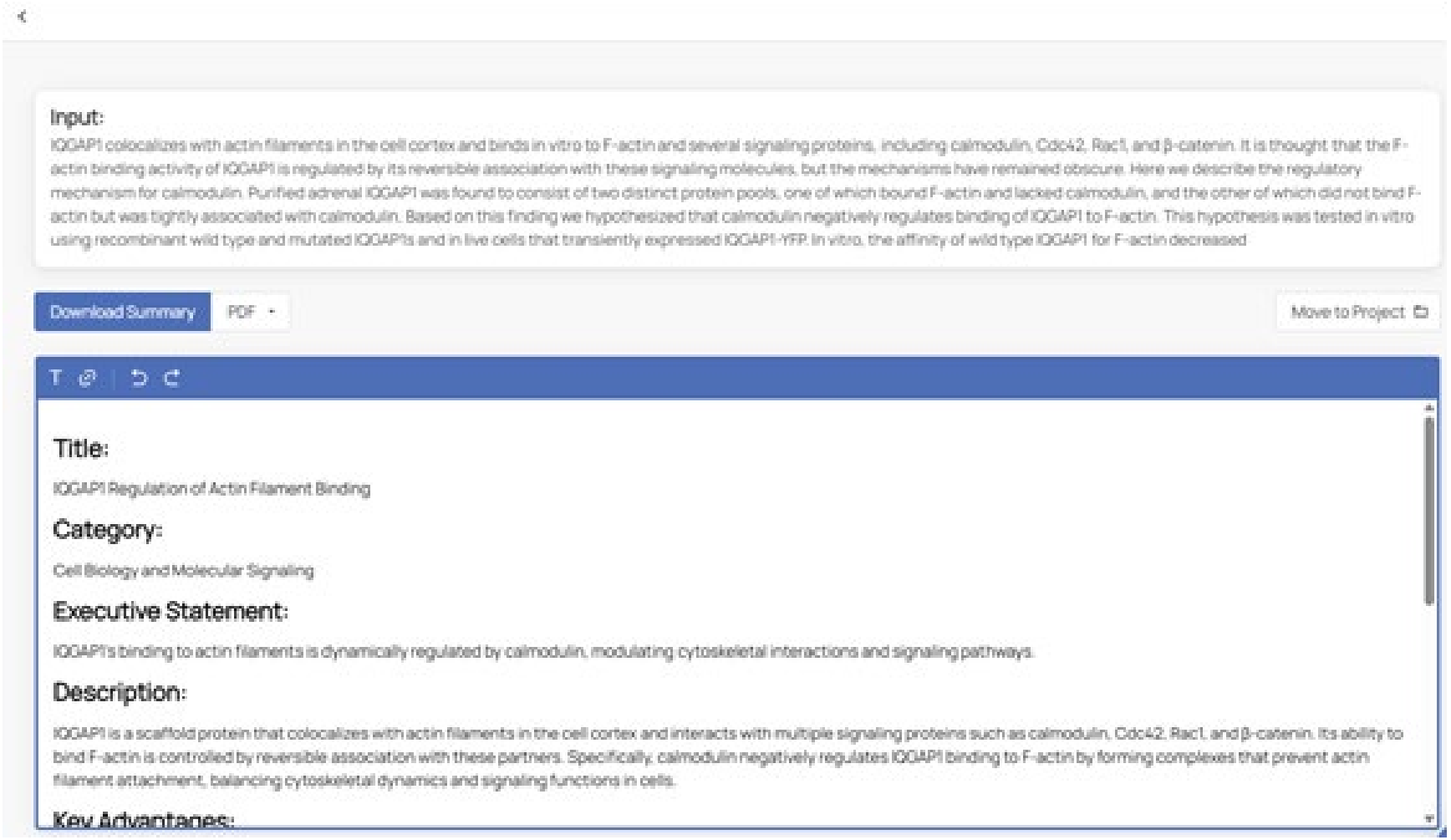
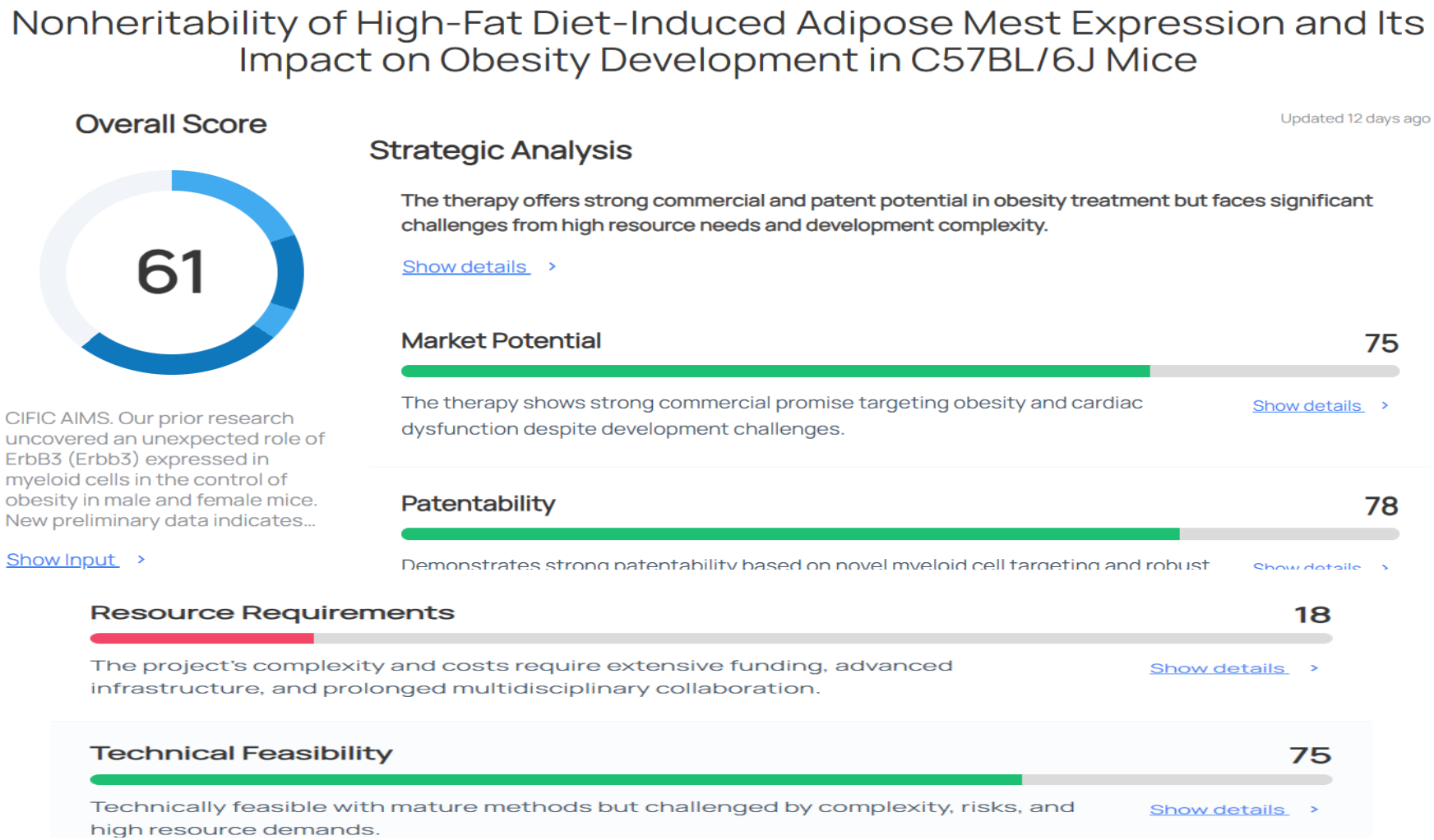
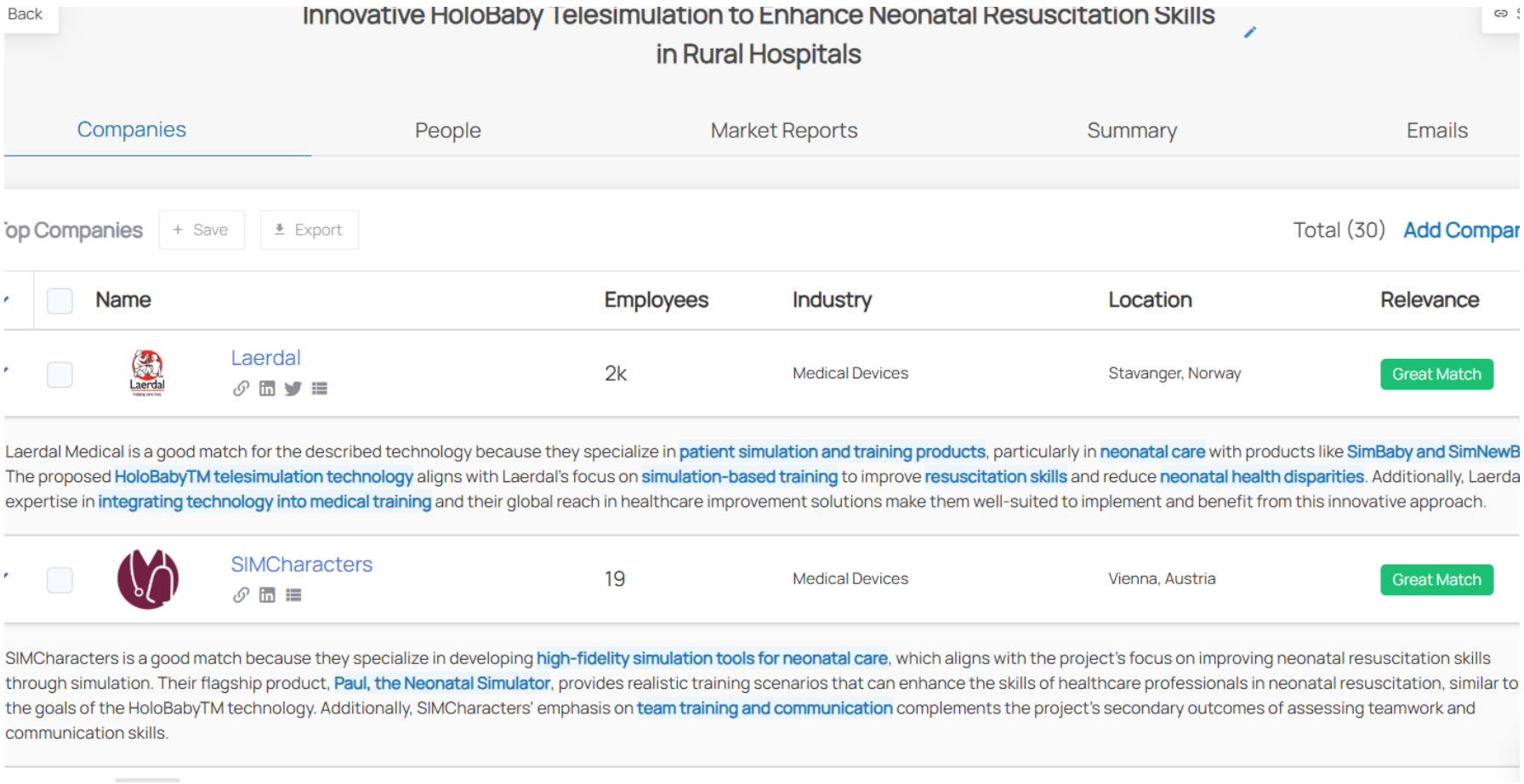
Process – Building Marketing Materials



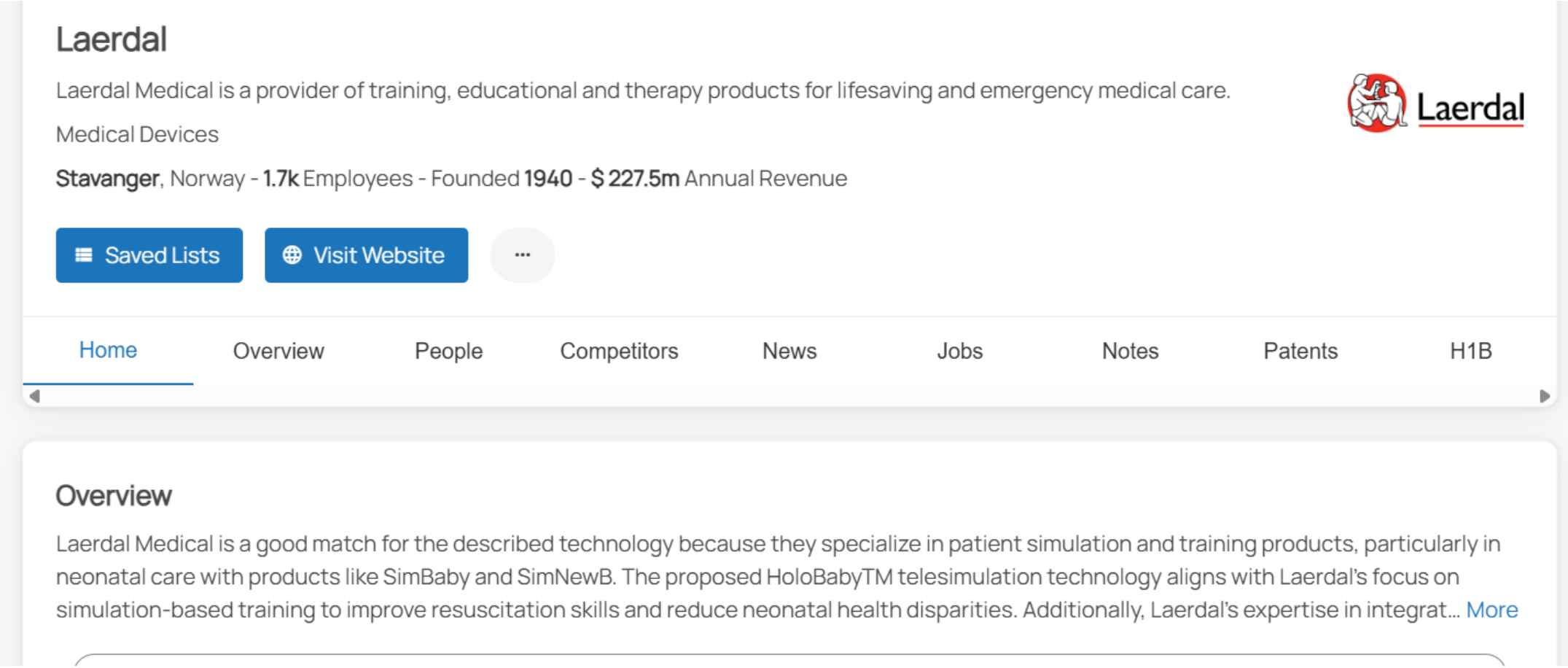
Process – tech assessment



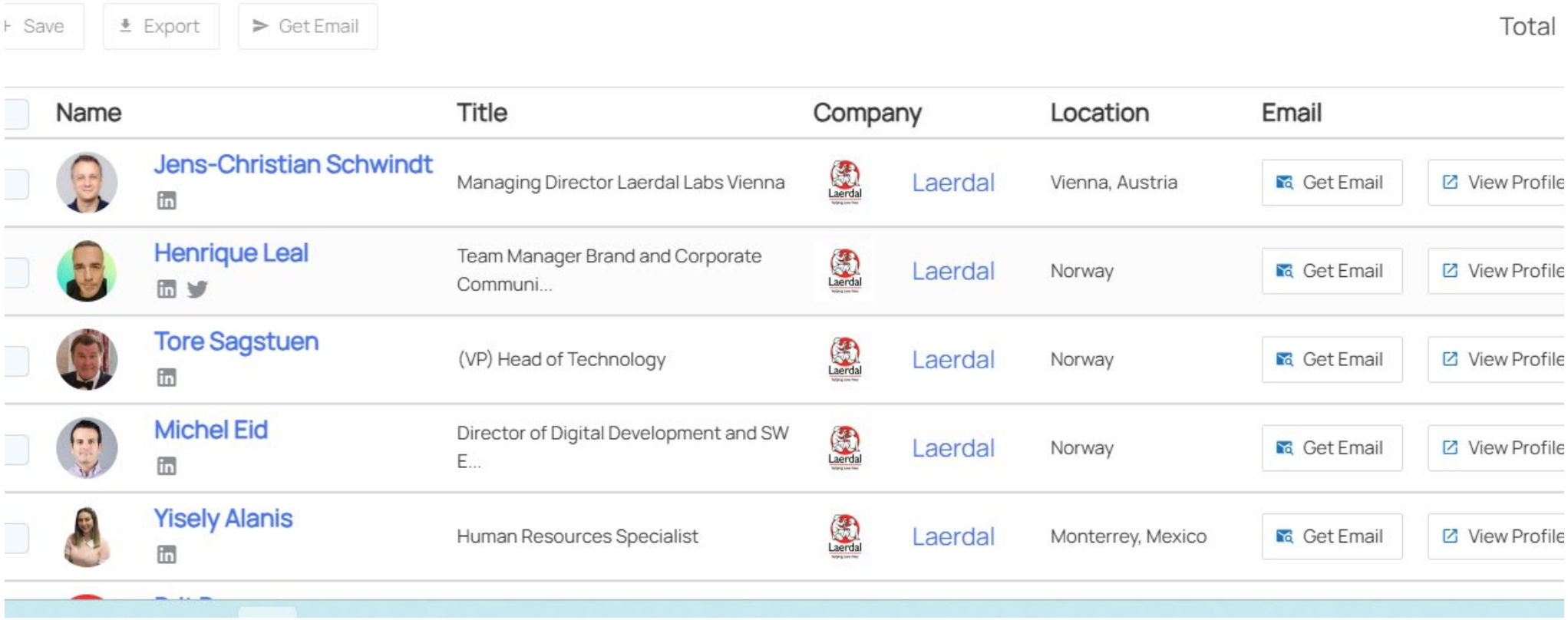
Process – Company targets



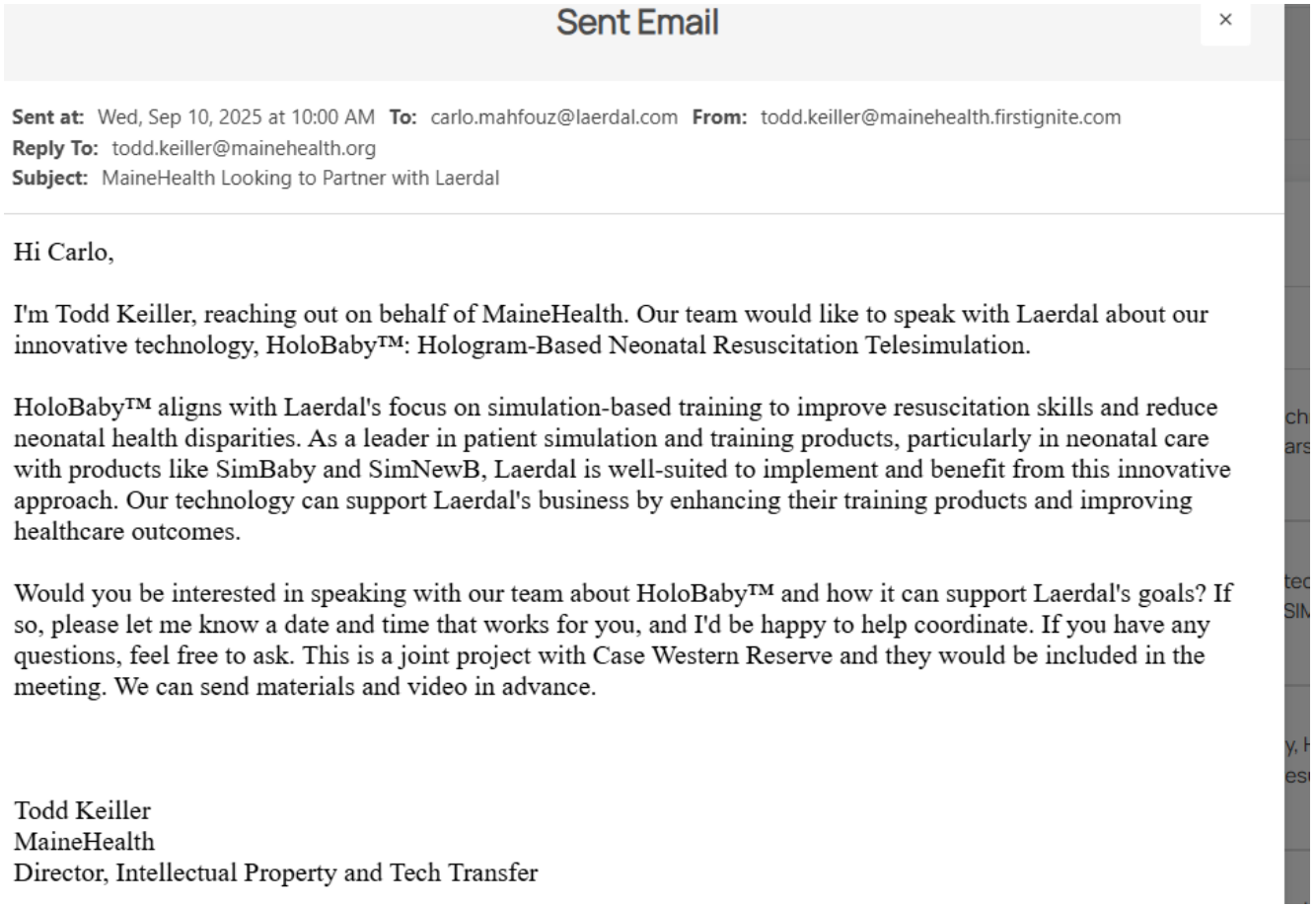
Process – find decision makers



Process – Decision makers



Process - email



Sent Email

Sent at: Wed, Sep 10, 2025 at 10:00 AM **To:** carlo.mahfouz@laerdal.com **From:** todd.keiller@mainehealth.firstignite.com
Reply To: todd.keiller@mainehealth.org
Subject: MaineHealth Looking to Partner with Laerdal

Hi Carlo,

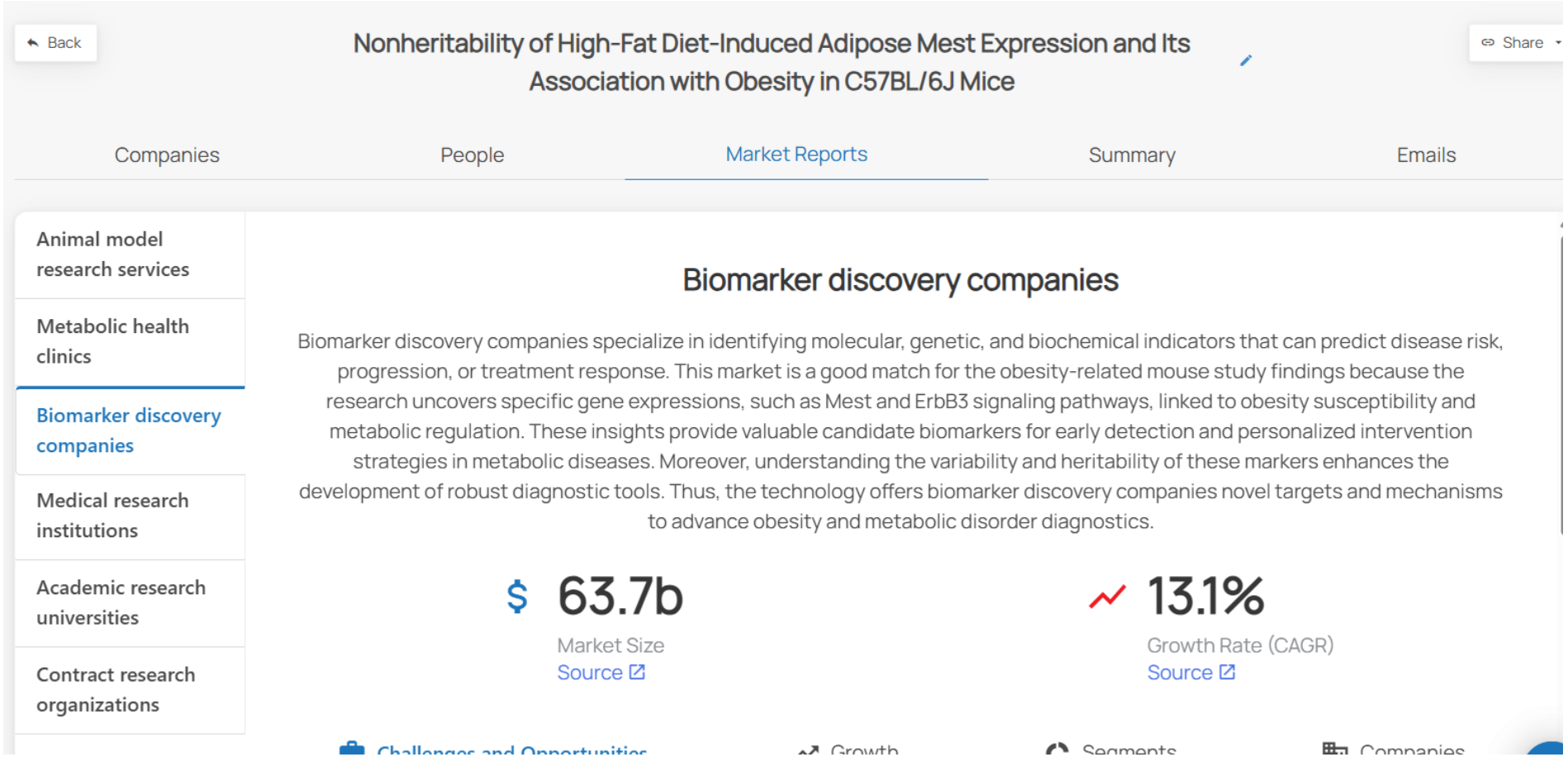
I'm Todd Keiller, reaching out on behalf of MaineHealth. Our team would like to speak with Laerdal about our innovative technology, HoloBaby™: Hologram-Based Neonatal Resuscitation Telesimulation.

HoloBaby™ aligns with Laerdal's focus on simulation-based training to improve resuscitation skills and reduce neonatal health disparities. As a leader in patient simulation and training products, particularly in neonatal care with products like SimBaby and SimNewB, Laerdal is well-suited to implement and benefit from this innovative approach. Our technology can support Laerdal's business by enhancing their training products and improving healthcare outcomes.

Would you be interested in speaking with our team about HoloBaby™ and how it can support Laerdal's goals? If so, please let me know a date and time that works for you, and I'd be happy to help coordinate. If you have any questions, feel free to ask. This is a joint project with Case Western Reserve and they would be included in the meeting. We can send materials and video in advance.

Todd Keiller
MaineHealth
Director, Intellectual Property and Tech Transfer

Process – finding potential new markets



Working with Industry

- Don’t be afraid!
- We’re here to help navigate the waters

Questions?