

# SenesTech, Inc.

NASDAQ: SNES

April 2019
INVESTOR PRESENTATION

senestech

### SenesTech Disclaimer

#### SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS

The following information and the statements made during this presentation contain forward-looking statements. These forward-looking statements are based on the current expectations and beliefs of the Company's management, as well as a number of assumptions concerning future events. The forward-looking statements include statements that reflect management's beliefs, plans, objectives, goals, expectations, anticipations and intentions with respect to our financial condition, results of operations, future performance and business, our business strategy and our current and future development plans. Forward-looking statements include, but are not limited to, statements about: the likelihood of regulatory approvals for our product candidates; the potential market opportunities for commercializing our product candidates; the anticipated results and effects of our product candidates and our ability to effectively market our products; our expectations regarding the potential market size for our product candidates; estimates of our expenses, capital requirements and need for additional financing; our ability to enter into strategic partnership agreements and to achieve the expected results from such arrangements; the initiation, timing, progress and results of future laboratory and field studies and other aspects of our research and development programs; our ability to manufacture our product candidates in a commercially efficient manner; the scope of protection we are able to obtain and maintain for our intellectual property rights covering our product candidates; our use of proceeds from any potential future debt or securities offerings; our financial performance; developments and projections relating to our competitors and our industry; and our ability to sell our products at commercially reasonable values.

Although the Company believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee future results, level of activity, performance or achievements. Many factors discussed in this presentation, some of which are beyond the Company's control, will be important in determining its future performance. Consequently, actual results may differ materially from those that might be anticipated from forward-looking statements. In light of these and other uncertainties, you should not regard the inclusion of a forward-looking statement in this presentation as a representation that the Company's plans and objectives will be achieved, and you should not place undue reliance on such forward-looking statements.

The Company undertakes no obligation to publicly update any forward looking statements, whether as a result of new information, future events or otherwise, except as required by law. All forward-looking statements in this presentation speak only as of the date of this presentation.



### **Recent Events**

- Key deployments in municipal markets: Washington D.C., St. Louis, Southern California transit agency and others
- Key deployments in food/agriculture markets: poultry production, egg facility
- Removal of "restricted use" designation by EPA, and 23 states so far
- Sound Science Speaker Series launched with current evidence and discussion of rodenticide resistance



## The Addressable Challenges



#### **Challenge #1** Food Security

Rodents destroy food through consumption and contamination. In 2014, 20% of stored food worldwide was lost due to rodent activity. <sup>2</sup>



#### **Challenge #2** Infrastructure Damage

Rats damage public infrastructure, estimated by the National Wildlife Research Center (NWRC) at over \$27 billion annually in the U.S. <sup>3</sup>



#### **Challenge #3 Disease and Poison**

Rodents transmit disease (>200 million deaths historically <sup>4</sup>), deadly pathogens and poisons to animals and humans.

<sup>1</sup> Derived from Markets and Markets press release titled "Rodenticides Market worth 1.23 Billion USD by 2022": <a href="https://www.marketsandmarkets.com/PressReleases/">https://www.marketsandmarkets.com/PressReleases/</a>

The total addressable rodenticide market is about \$1 Billion annually. 1

How much more is it worth to effectively and safely address these challenges?

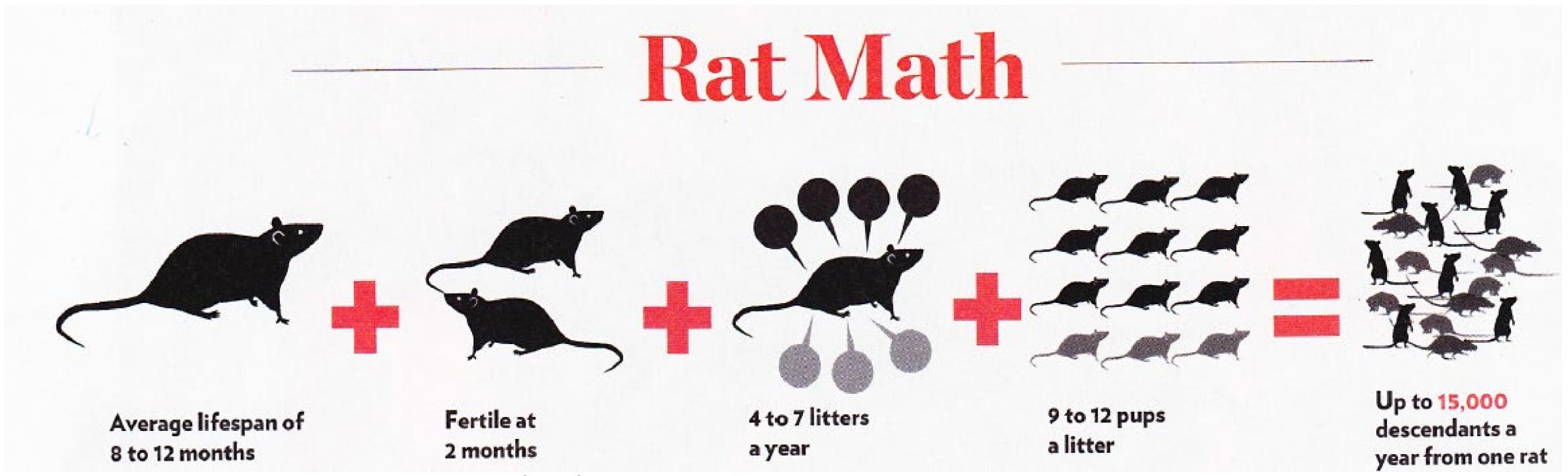


<sup>&</sup>lt;sup>2</sup> QA Magazine, Commensal Rodents Eat at Our Tables, <a href="http://www.qualityassurancemag.com/article/qa1014-rodents-control-management/">http://www.qualityassurancemag.com/article/qa1014-rodents-control-management/</a>
<sup>3</sup> ENVIRONMENTAL AND ECONOMIC COSTS OF VERTERRATE SPECIES INVASIONS INTO THE UNITED STATES, DAVID PIMENTEL, College of Agriculture and Life Sciences.

<sup>&</sup>lt;sup>3</sup> ENVIRONMENTAL AND ECONOMIC COSTS OF VERTEBRATE SPECIES INVASIONS INTO THE UNITED STATES, DAVID PIMENTEL, College of Agriculture and Life Sciences, Cornell University, Ithaca, New York, USA. <a href="https://www.aphis.usda.gov/wildlife\_damage/nwrc/symposia/invasive\_symposium/content/Pimentel2\_8\_MVIS.pdf">https://www.aphis.usda.gov/wildlife\_damage/nwrc/symposia/invasive\_symposium/content/Pimentel2\_8\_MVIS.pdf</a>

<sup>&</sup>lt;sup>4</sup> BBC News, Decoding the Black Death, <a href="http://news.bbc.co.uk/2/hi/health/1576875.stm">http://news.bbc.co.uk/2/hi/health/1576875.stm</a>

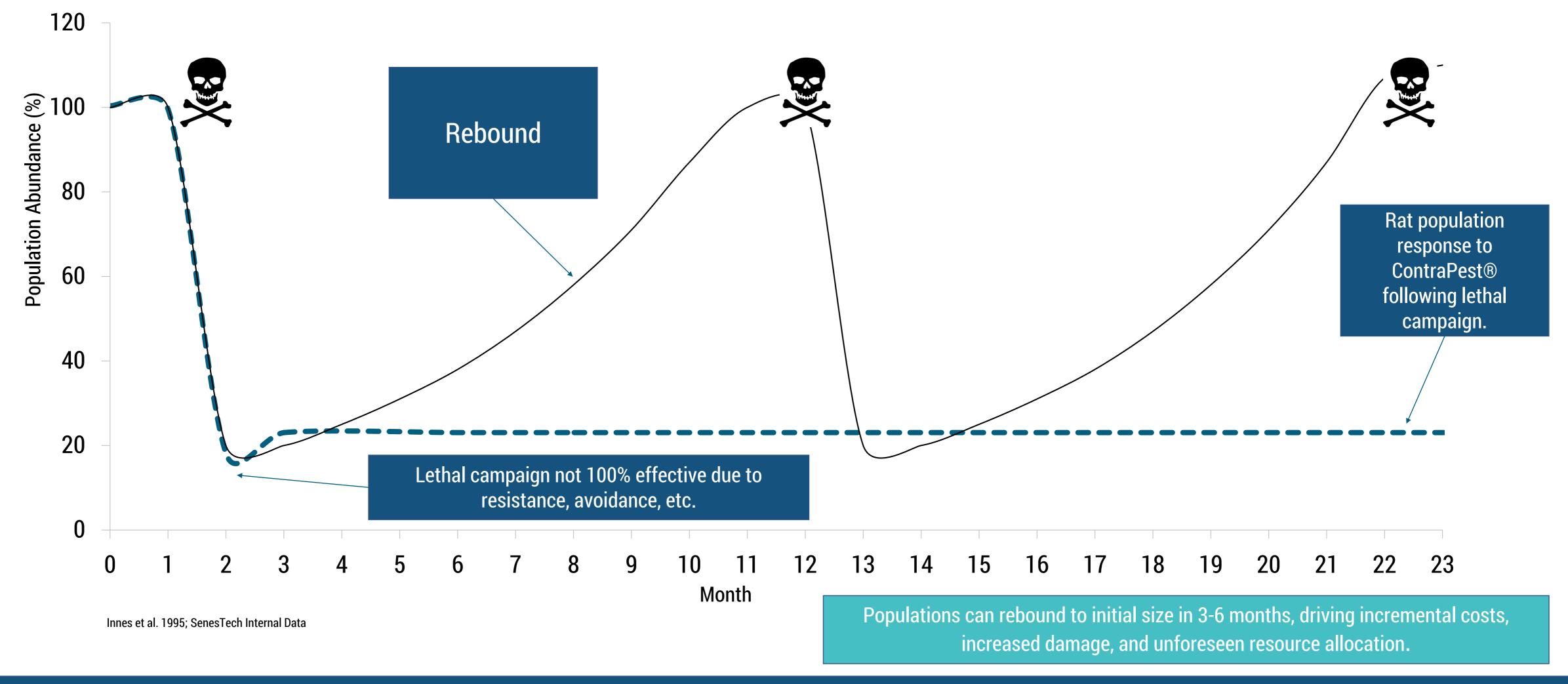
## Reproduction is the Source of Infestations



Chicagomag.com 2015; National Geographic How two rats become 15,000 in one year. [Video file]. (2013). Retrieved February 15, 2018, from https://www.youtube.com/watch?v=RJA4IW\_pkeo



# Lethal Campaigns Can Leave Opportunity for Rebound

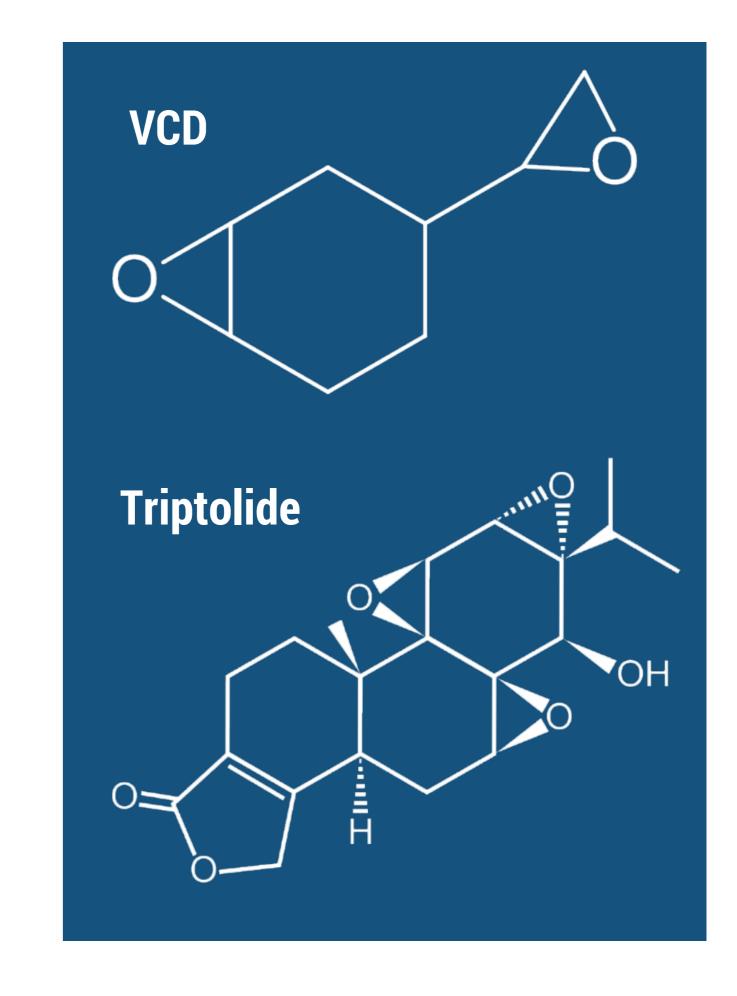




### **Our Solution**

ContraPest is a highly attractive, liquid bait containing the active ingredients ("AI") 4-vinylcyclohexene diepoxide, or VCD, and triptolide, a plant-derived chemical, with a high fat content and sweet taste.

- Rats repeatedly feed, and their fertility is reduced as they consume the bait. The
  active ingredients target both male and female rodents resulting in sustained
  contraception with continued consumption
- Sustained impact and avoids population "rebound"
  - When lethal means are used, the death rate is always less than birth rate for rats
- Designed To Minimize Risk to Handlers, Non-targets And Other Animals





# Delivering an Effective Product: Lab Studies

- Multiple, free-choice laboratory studies have repeatedly demonstrated efficacy.
- No observable adverse effects.

"If a rat consumes ContraPest, they do not reproduce."

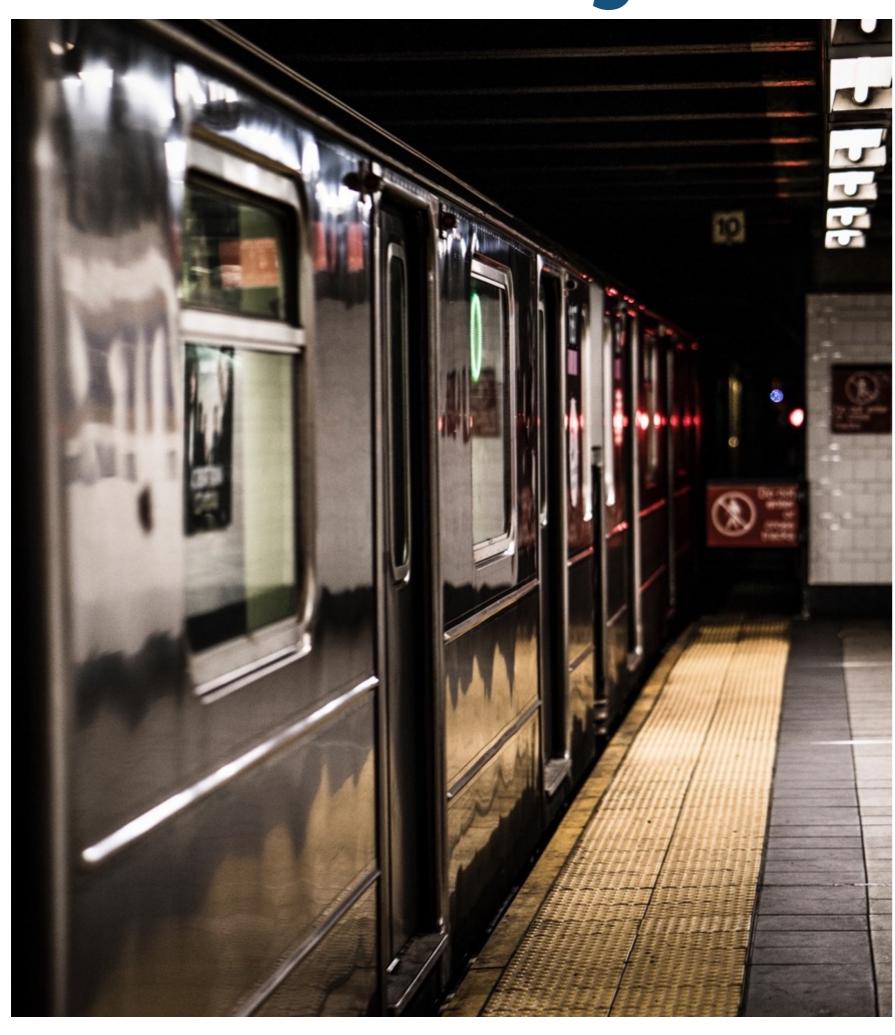


This has been confirmed in laboratory and third party studies. (1)

(1) Witmer, G., S. Raymond-Whish, R. Moulton, B. Pyzyna, E. Calloway, C. A. Dyer, L. P. Mayer, and P. Hoyer. 2017. Compromised fertility in free feeding of wild-caught Norway rats (Rattus norvegicus with a liquid bait containing 4-vinylcyclohexene diepoxide and triptolide. Journal of Zoo and Wildlife Medicine 48:80-90.



## Delivering an Effective Product: Field Studies



#### **URBAN STUDIES**

#### Results

- Rats repeatedly consumed ContraPest<sup>®</sup> in the presence of rodenticides, trash, other food sources, exclusion strategies, and abundant water options.
- 18% 67% reduction in rat activity, including suppression of seasonal population peak.
- Non-standard spacing did not impact efficacy.



## Delivering an Effective Product: Field Studies

#### **AGRICULTURAL STUDY**

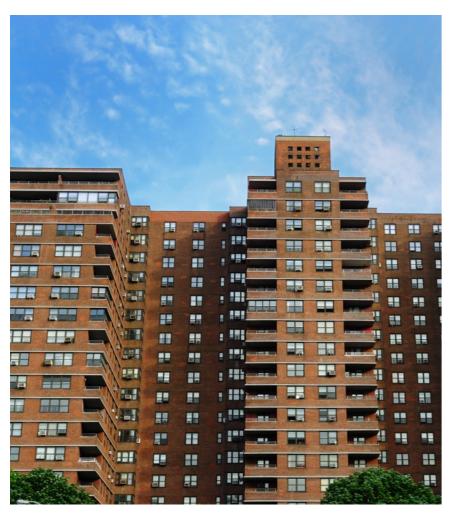
#### Results

- Rats consumed ContraPest® in the presence of rodenticides, animal feed, and abundant water options.
- Sites with ContraPest® displayed 46% lower signs of activity than just rodenticides alone.
- 100% of mature female rats on sites with rodenticide alone were found to be pregnant or lactating, versus 33% on sites with ContraPest.





### Case Studies and Success Stories









- Hospitals
- Apartment buildings
- Zoos
- Animal sanctuaries
- Animal research and care facilities
- City parks
- Islands
- Food production facilities



## EPA Approved



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs

Registration Division (7505P)

1200 Pennsylvania Ave., N.W.

Washington, D.C. 20460

#### NOTICE OF PESTICIDE:

X Registration

\_\_\_ Reregistration (under FIFRA, as amended) EPA Reg. Number:

Date of Issuance:

91601-1

8/2/16

Term of Issuance:

Unconditional

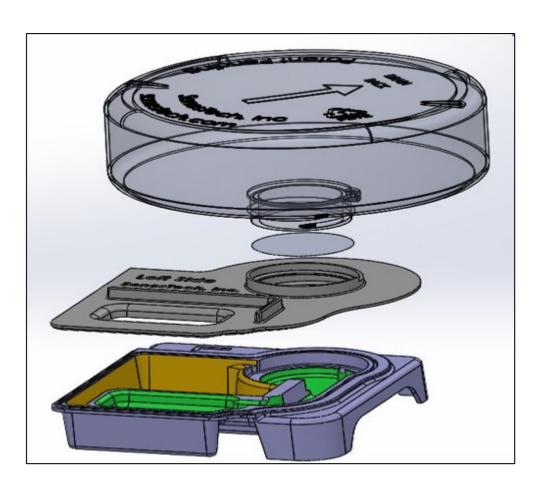
Name of Pesticide Product:

ContraPest









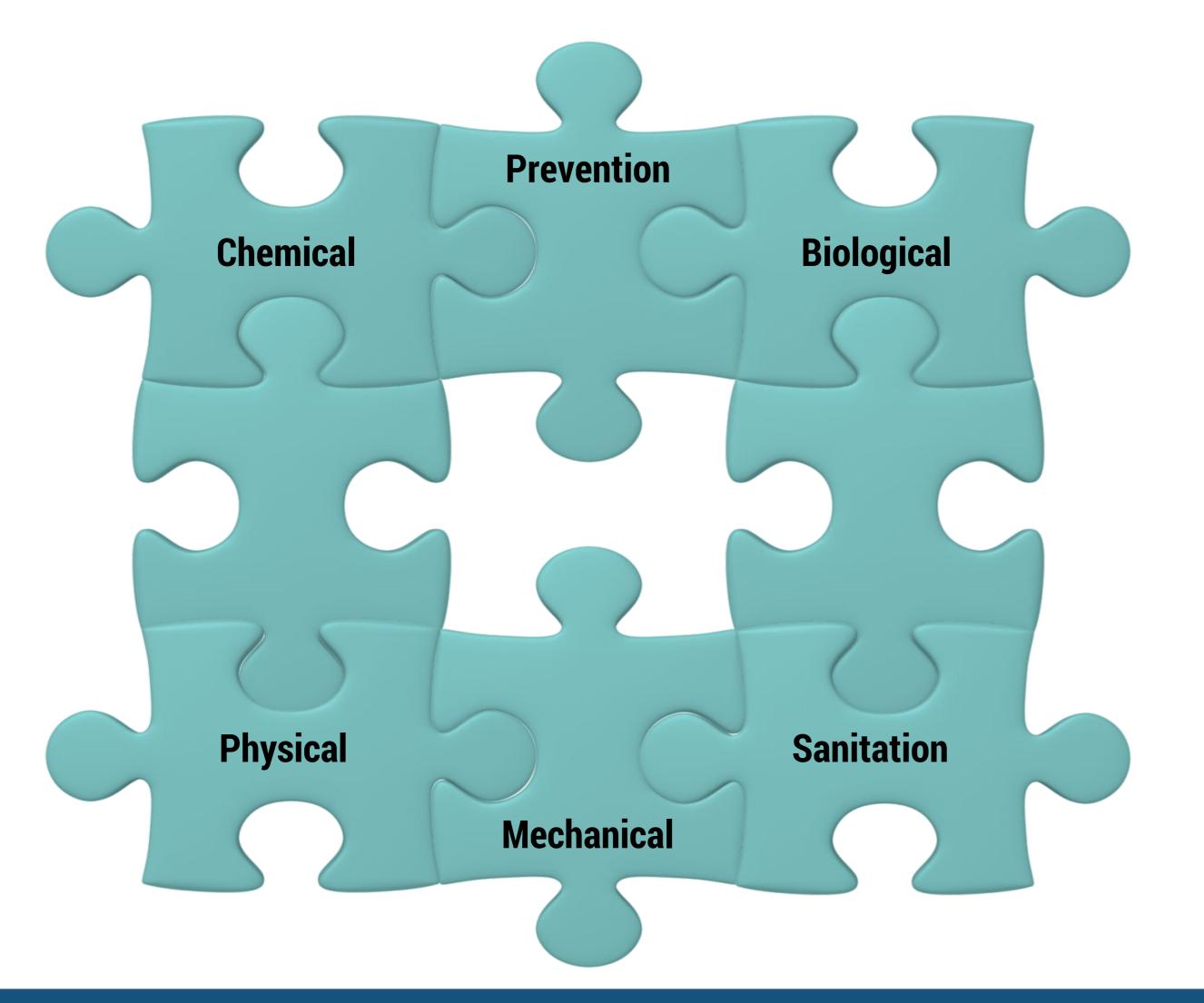




# Commercialization Strategy

senestech

### ContraPest: The Anchor to IPM

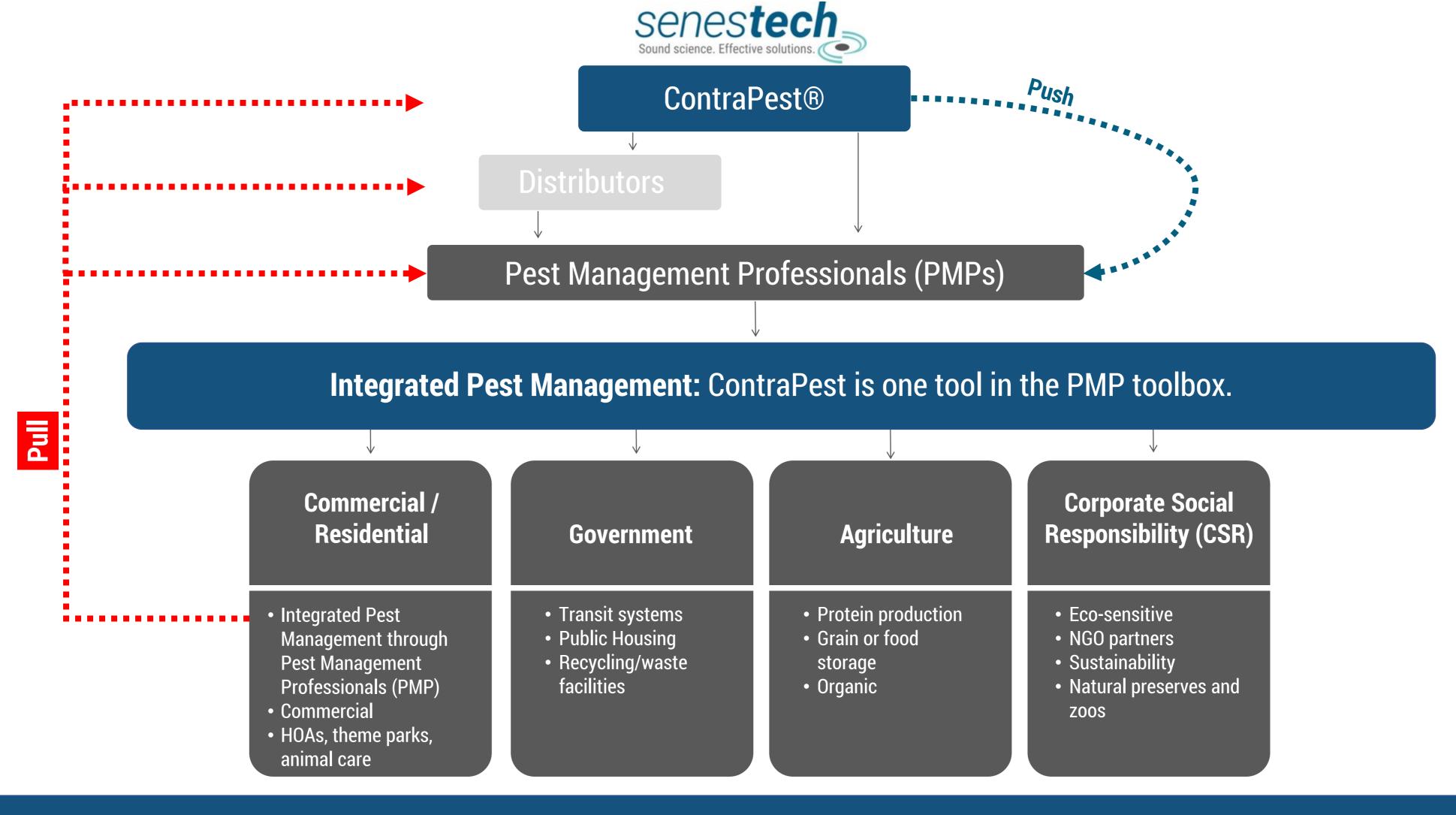




ContraPest can be used as a standalone solution or within an Integrated Pest Management (IPM) plan to help reduce reproduction and magnify the success of infestation control methodologies.



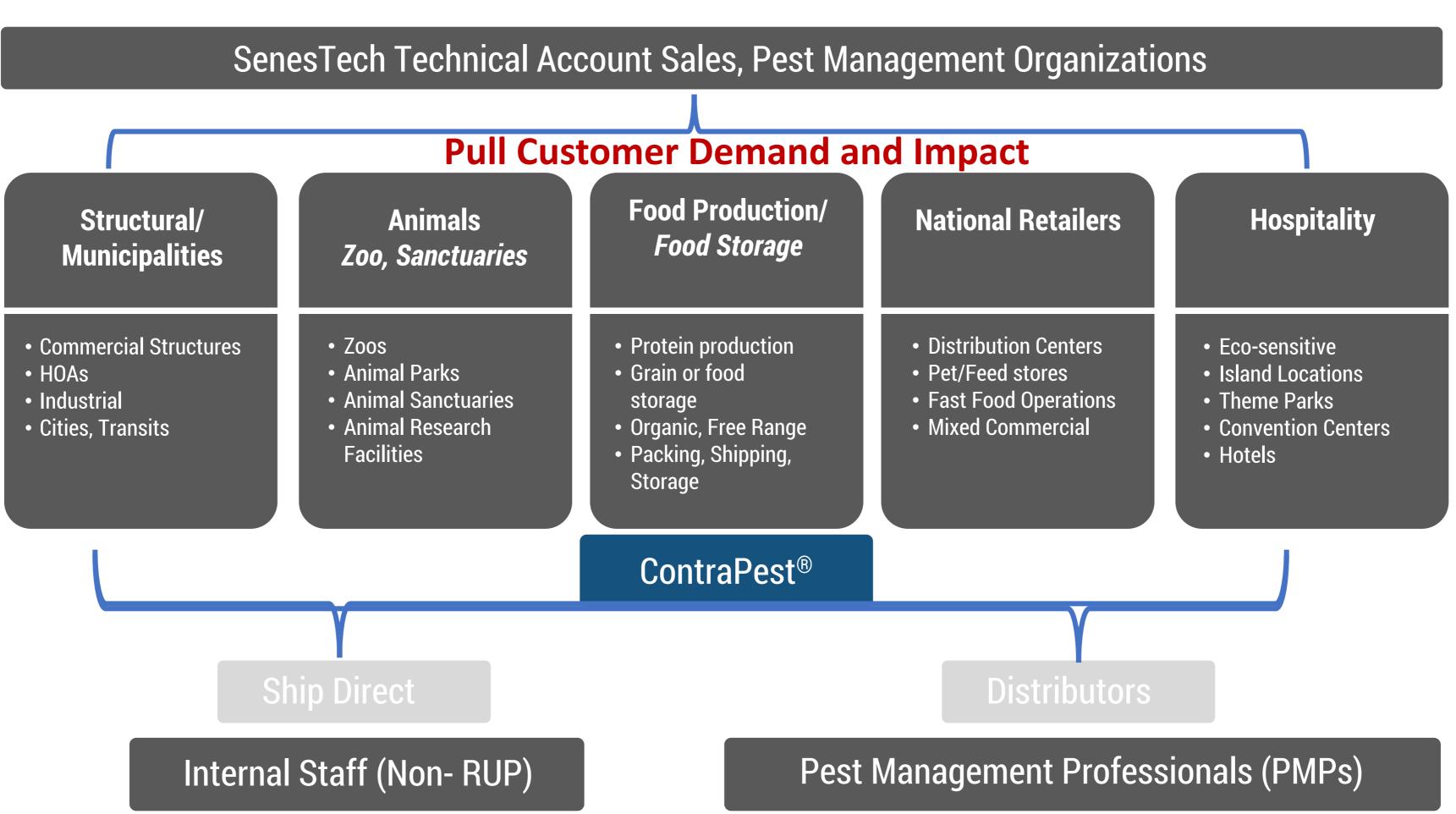
## Market Approach





## **Evolved Market Approach**







### **Product Enhancements and Extensions**

Bait Stations





Non-Liquid Formulations



Mice





# Pipeline

PRODUCT	PRIMARY TARGET(S)	MARKET OPPORTUNITY	
Additional Rodents	Mice, voles	>60% of overall rodent market <sup>1</sup>	
Boar taint	Boars	\$1.2 billion <sup>2</sup>	
Feral animal fertility control	Feral Dogs, Cats and Hogs	\$1.5 billion <sup>3</sup>	
Large Animal	Whitetail Deer	?	
Companion Animals	Dogs and/or Cats	?	

<sup>&</sup>lt;sup>1</sup> 2017 State of the Rodent Market, PCT Magazine

<sup>&</sup>lt;sup>3</sup> ENVIRONMENTAL AND ECONOMIC COSTS OF VERTEBRATE SPECIES INVASIONS INTO THE UNITED STATES, DAVID PIMENTEL, College of Agriculture and Life Sciences, Cornell University, Ithaca, New York, USA. <a href="https://www.aphis.usda.gov/wildlife\_damage/nwrc/symposia/invasive\_symposium/content/Pimentel2\_8\_MVIS.pdf">https://www.aphis.usda.gov/wildlife\_damage/nwrc/symposia/invasive\_symposium/content/Pimentel2\_8\_MVIS.pdf</a>



<sup>&</sup>lt;sup>2</sup> Internal estimate

### **Balance Sheet**

(\$ in Millions)	FY 2018
Cash, cash equivalents and highly liquid investments	\$4.9
Total Assets	\$7.8
Debt	\$0.5
Common Equity	\$6.3
Shares Outstanding	23.6
Warrants Outstanding	11.2



### Income Statement

(\$ in Millions, except per share data)	2018	2017
Revenue	\$0.30	\$0.05
Operating Expenses	11.9	12.3
Net loss	(11.9)	(12.3)
Net loss per share	\$(0.63)	\$(1.12)
Adjusted EBITDA Loss (Non-GAAP¹)	\$(8.0)	\$(8.2)

<sup>&</sup>lt;sup>1</sup> See appendix for reconciliation to GAAP



# Senes Tech Investment Highlights

- A billion-dollar market with a multi-billion dollar impact
- A proprietary technology that has no direct competition
- Meets customer need for efficacy as well as service provider need for efficiency and profitability
- A management team that blends sound science, disruptive product commercialization and pest control industry experience







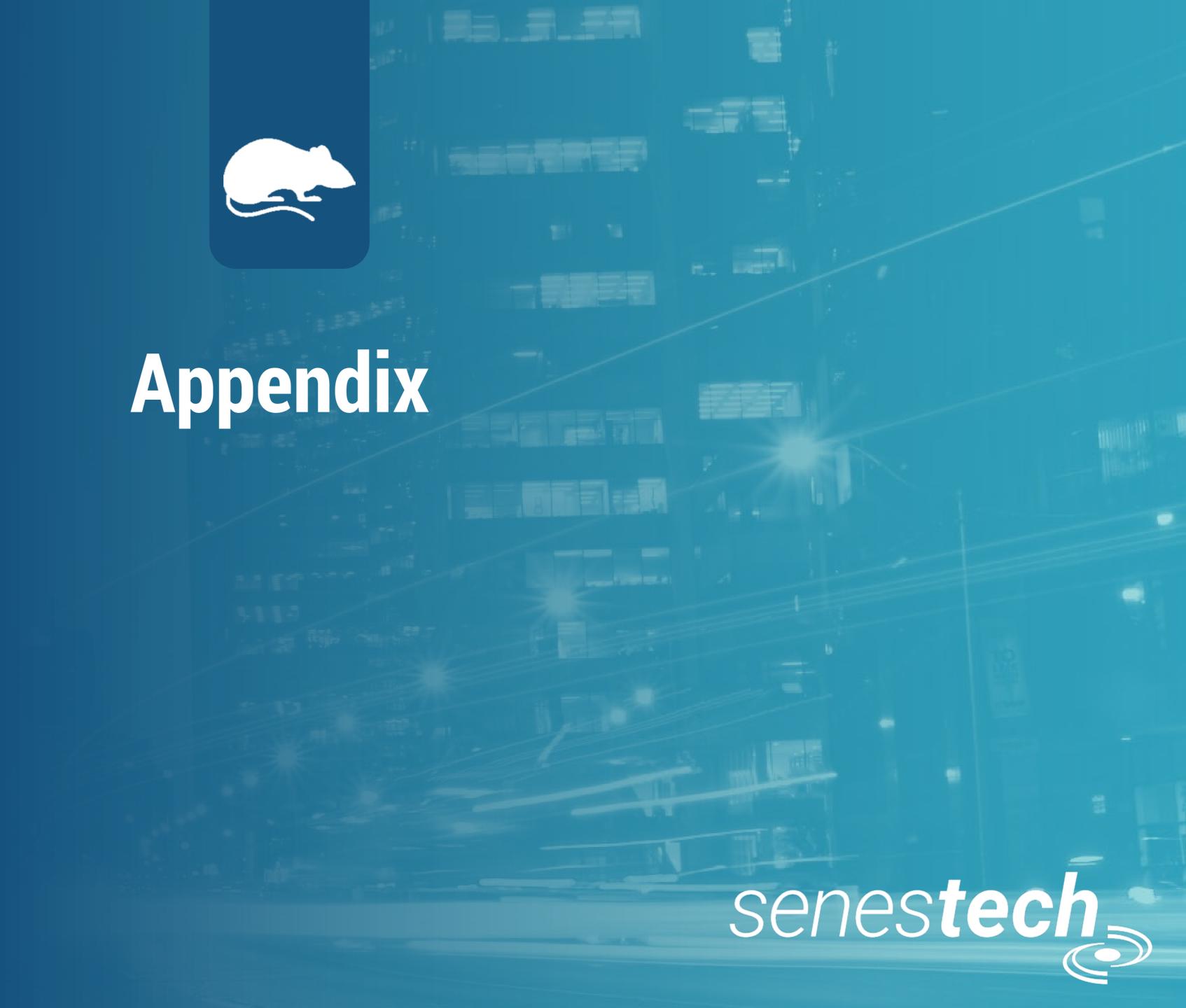


### Thank You



- SenesTech
  3140 N Caden Court
  Flagstaff, AZ 86004
- Facebook.com/senestech
  Twitter.com/senestech
  LinkedIn.com/company/senestech-inc-/
- info@senestech.com
- 928-779-4143
- www.senestech.com





## Management



**Dr. Loretta Mayer**Chief Executive Officer
and Chairman of the
Board



**Tom Chesterman Chief Financial Officer** 



**Bill Baker**Vice President Finance



Paul M. Palz Vice President, Corporate Controller



**Dr. Cheryl Dyer**Chief Research Officer
Director, Retired



Kim Wolin Executive Vice President Operations



**Brandy Pyzyna**Vice President, Scientific
Operations



**Tracey Hayes**Vice President of Human
Relations



### **Board of Directors**



Jamie Bechtel, JD, PhD
Lead Independent Director, Chair of
Compensation and Nominating and Corporate
Governance Committees, member of Finance
and Marketing Committees



Matthew Szot
Director, Chair of the Audit and Finance
Committees, member of the Compensation and
Nominating and Corporate Governance
Committees



Dr. Loretta Mayer, Ph.D.
Chair of the Board,
SenesTech Chief Executive Officer
and Chief Scientific Officer,
co-Founder



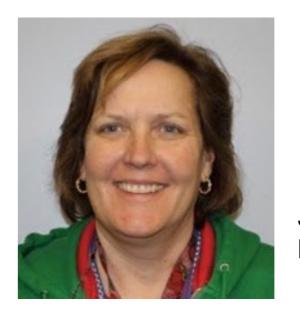
**Delphine Francois Chiavarini**Director, Chair of Marketing Committee, member of the Audit Committee



Kenneth Seigel
Director, Finance Committee,
Nominating and Corporate
Governance Committee, and Sales
and Corporate Strategy Committee



Marc Dumont
Director, member of the Audit, Finance and
Nominating and Corporate Governance
Committees



Julia Williams, M.D.

Director, member of Compensation Committee

