

Accelerating Global Health through Bioscience

Unlocking Innate Immunity – a Novel Approach to
Shrimp Vaccination



CONFIDENTIAL

TCRS Shrimp Summit – Bali June 2025

We bring the world transformative
bioscience solutions supporting
a more sustainable future.

Disease Control is Critical for Global Food Security

Dalan's focus: underserved markets:
Honeybees / Shrimp Aquaculture



The world's 1st vaccine for honey bees

- ▶ Efficacy
- ▶ Safety
- ▶ Purity
- ▶ Consistency

Science

One Bacterin - Broad Spectrum Protection in Bees

Lab Efficacy POC
American Foulbrood (AFB)

50% reduction in infection

Field Studies POC
Deformed Wing Virus (DWV)

>80% reduction in viral load of DVW-B

The Power of Innate Immunity

Innate immunity provides a first-line-of-defense against infectious diseases caused by bacteria, viruses, and fungi in all species.

Innate vs. Adaptive Immunity

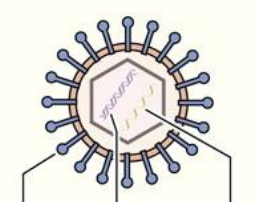

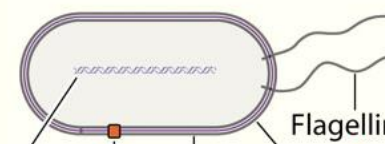
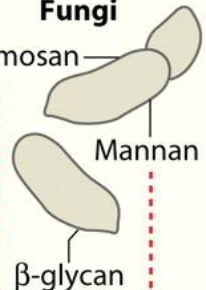
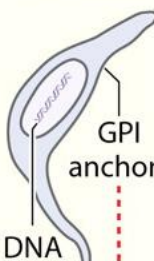
Innate immunity

- Rapid and effective
- Nonspecific
- Indiscriminate
- Immunological memory

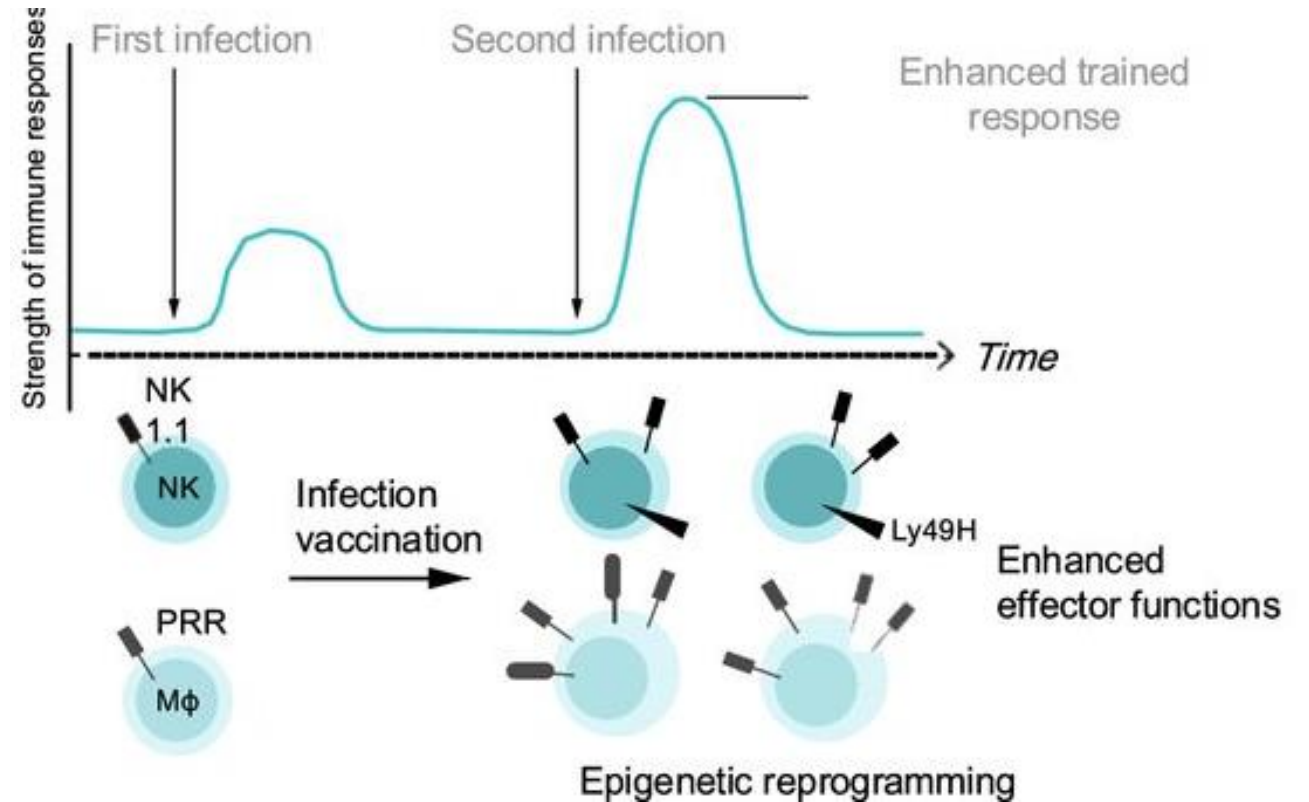
Adaptive immunity

- Needs 10-14 days
- Specific activation
- Immunological memory

Activating Innate Immunity

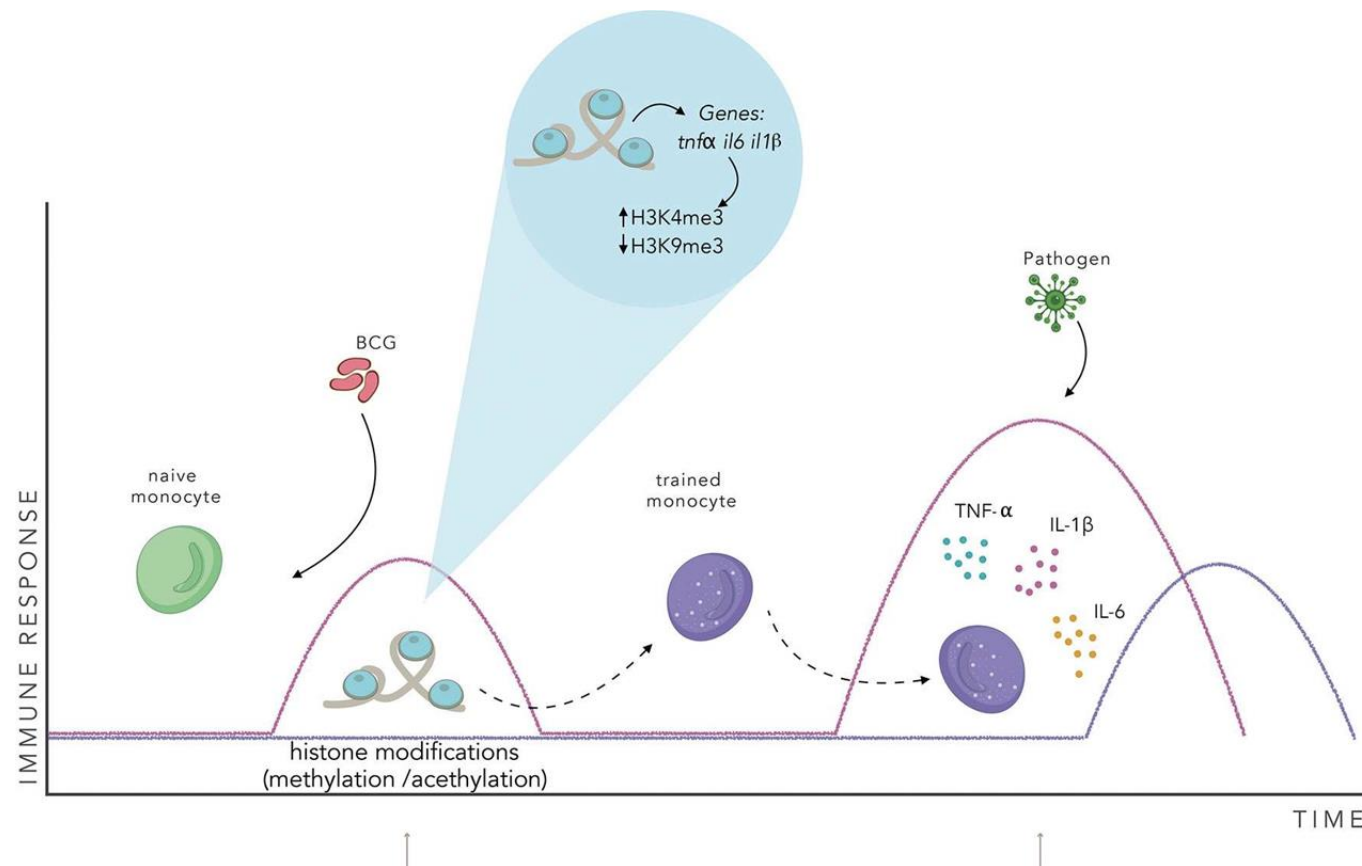
	Viruses	Gram-positive bacteria	Gram-negative bacteria	Fungi	Protozoa
					
TLRs:	TLR2, 4 TLR9 TLR3, 7/8	TLR9 TLR2 TLR2 TLR2	TLR9 TLR2 TLR2 TLR4 TLR5	TLR2 TLR2 TLR2,4	TLR9 TLR2,4
RLRs:	RIG-I/MDA5 (PKR)				
NLRs:	NALP3 NALP3	NALP3 NOD2, NALP1/3	NALP3 NOD2, NALP1/3 IPAF		
DNA sensors:	+	+	+		

Innate Immune System Memory



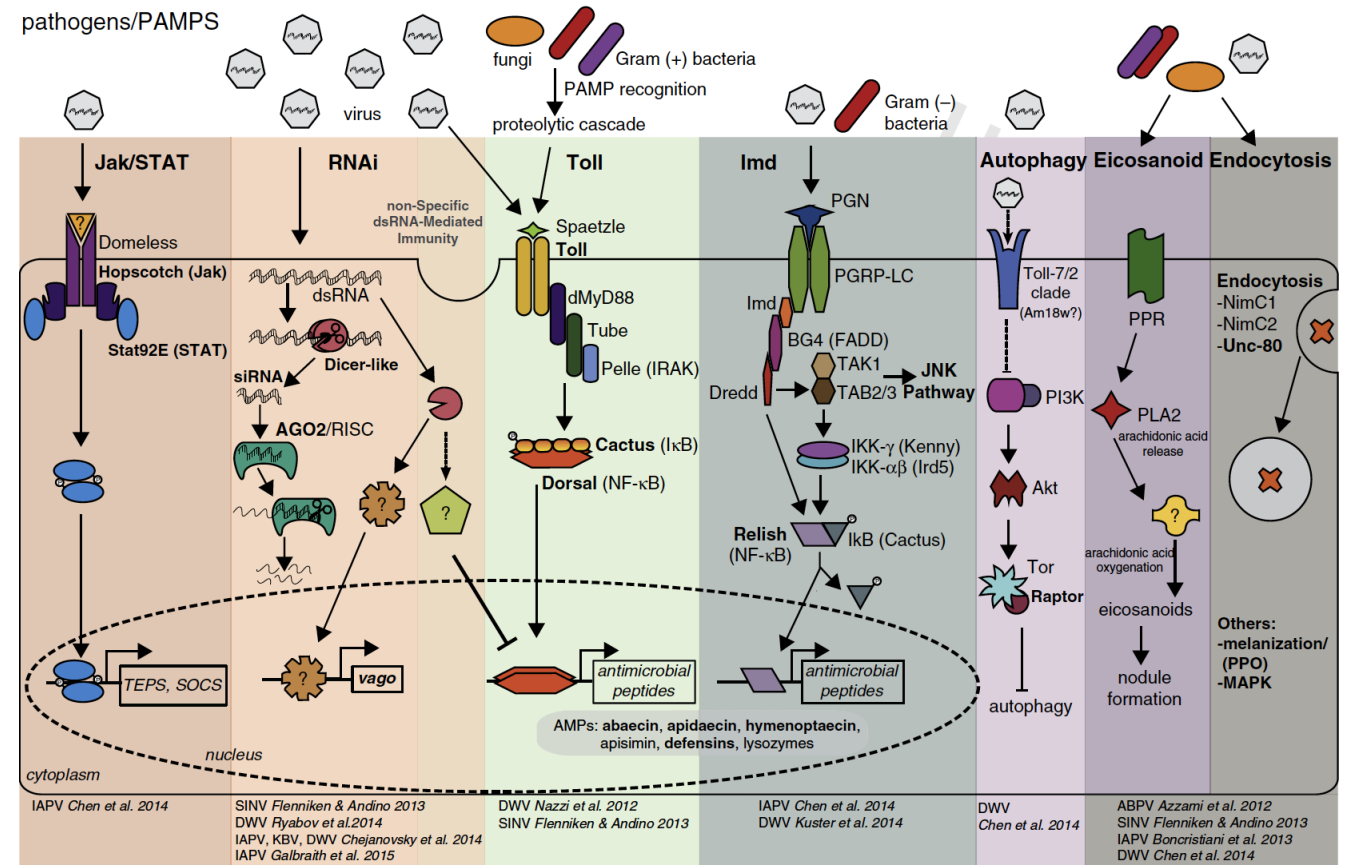
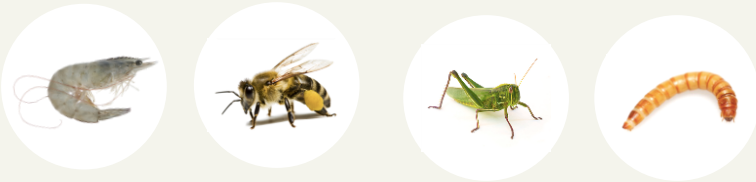
WANG ET AL. 2022

Activation Creates Broad Spectrum Long-Term Protection



COVIÁN ET AL. 2019

Common Immune Pathways



A translucent shrimp is shown in profile, facing left, resting on a dark, textured surface that appears to be rocks. The shrimp's internal organs and structures are visible through its transparent body. The background is dark and out of focus.

Science

TGIP – Transgenerational Immune Priming

Key feature of the invertebrate innate immune system

Our platform: vaccines to activate innate immunity

- Broad spectrum

We have demonstrated our technology can work against bacteria, viruses, and fungi.

- Transgenerational Immune Priming (TGIP)

One-to-many protection by vaccinating the parent animal

- Safe

Non-chemical, non-GMO, regulator-approved



Shrimp candidate

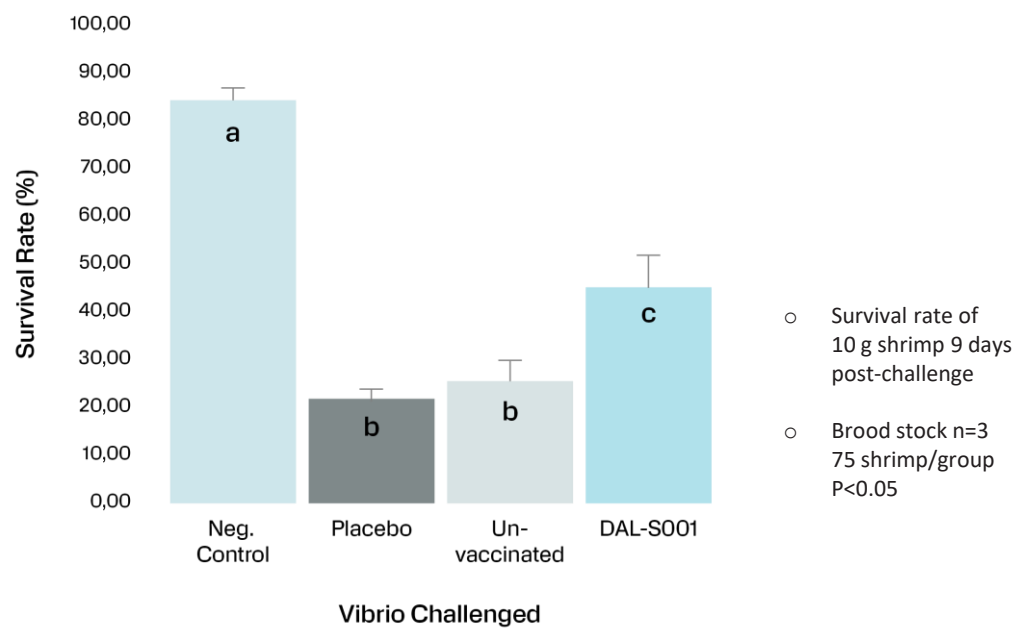


Shrimp Need Effective Vaccines

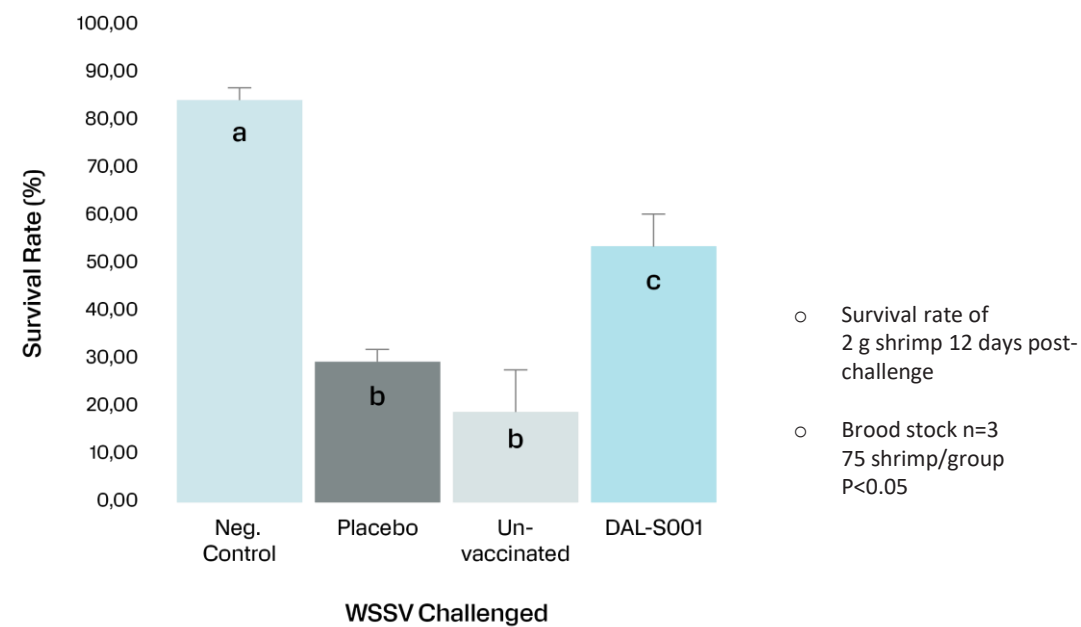
- ▶ Nutrient-rich, low-fat protein
- ▶ Key gap in disease management
- ▶ Durable, broad-spectrum protection

POC - Broad Spectrum Protection in Shrimp

Lab Efficacy Studies
45% absolute survival

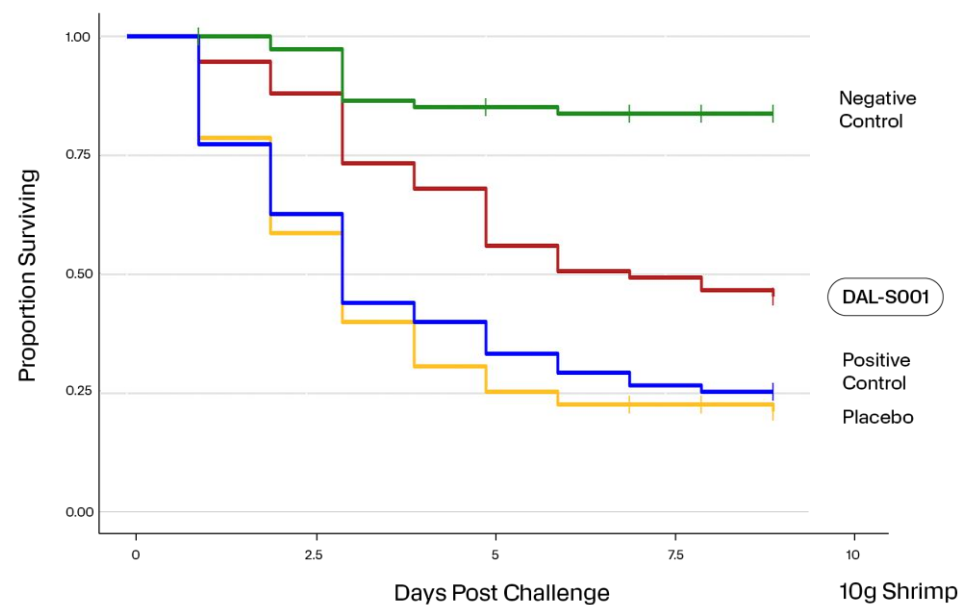


Lab Efficacy Studies: WSSV
53% absolute survival

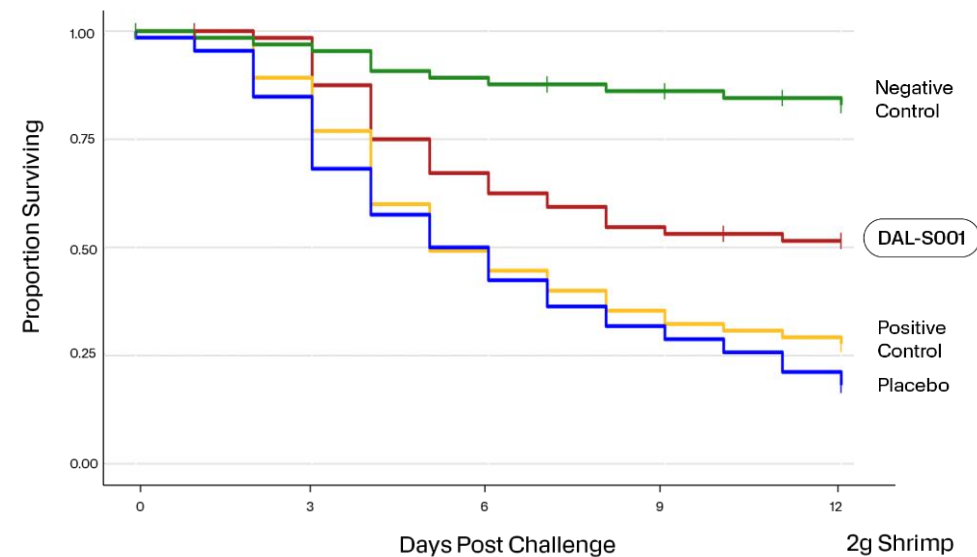


POC – Vaccination slows the spread of disease

EMS Challenge



WSSV Challenge



Science

Product Development Plan



Our Team

Building For Scale



Annette Kleiser
Dalan CEO and
Co-Founder



Brad Prunte
COO



Adam Costello
Director, Commercial
Operations North America



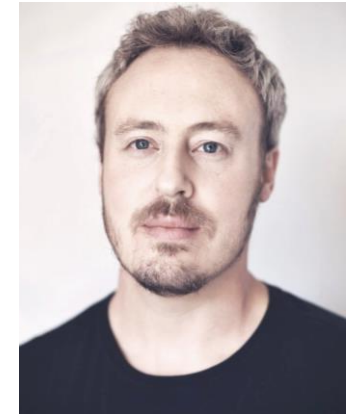
Morgan Halme
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and Marketing



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Global Head of Business
Development



Erin Strait
Chief Science Officer



Warren Rickard
Head of Strategy

Board of Directors



Annette Kleiser
Dalan CEO and
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Former President, Colgate-
Palmolive (Europe)



Gavin Mathis
Chief of Staff & Platform
Partner, Prime Movers Lab



Linda Rhodes
Animal Health Entrepreneur and
Veterinarian



Neal Carter
President, Okanagan
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Thank you.

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