

¿Cómo se defiende *Piscirickettsia salmonis*? Nuevas claves para controlar el SRS con fagos

Jaime Romero

Laboratorio de Biotecnología de Alimentos, Unidad de Alimentos, INTA, Universidad de Chile, Santiago, Chile

jromero@inta.uchile.cl

- Bobay, L., Touchon, M. & Rocha, E. 2014. Pervasive Domestication of Defective Prophages by Bacteria. *Proc. Natl. Acad. Sci.*, 111: 12127-12132.
- Cabello, F., Millanao, A. & Godfrey, H. 2025. *Piscirickettsia salmonis* Pathogenicity: Using the Damage-Response Framework to Look Beyond Smoke and Mirrors. *MBio*, 16: e03821-24.
- Casjens, S. 2003. Prophages and Bacterial Genomics: What Have We Learned So Far? *Mol. Microbiol.*, 49: 277-300.
- Figueroa, J., Rauch, C., Troncoso, J., Vargas-Chacoff, L.; y col. 2021. Protein-Based Vaccine Protects against *Piscirickettsia salmonis* in Atlantic Salmon (*Salmo salar*). *Front. Immunol.*, 12: 602689.
- Gallardo-Matus, J. 2022. Why Vaccines Fail against *Piscirickettsiosis* in Farmed Salmon and Trout and How to Avoid It: A Review. *Front. Immunol.*, 13: 1019404.
- Katharios, P., Kalatzis, P., Kokkari, C., Sarropoulou, E. & Middelboe, M. 2017. Isolation and Characterization of a N4-Like Lytic Bacteriophage Infecting *Vibrio splendidus*, a Pathogen of Fish and Bivalves. *PLoS ONE*, 12: e0190083.
- Maisey, K., Montero, R. & Christodoulides, M. 2017. Vaccines for *Piscirickettsiosis* (Salmonid Rickettsial Septicaemia, SRS): The Chile Perspective. *Expert Rev. Vaccines*, 16: 215-228.
- Pontigo, J., Espinoza, C., Hernandez, M., Nourdin, G., Oliver, C., Avendaño-Herrera, R., Valenzuela-Avilés, P., Torrealba, D., Figueroa, C., Mercado, L., Dixon, B., Conejeros, P. & Ramírez, C. & Romero, J. 2025. Know Your Enemy: *Piscirickettsia salmonis* and Phage Interactions Using an In Silico Perspective. *Antibiotics*, 14: 558.
- Sernapesca. 2023. Informe Sanitario Anual 2023. [<https://www.sernapesca.cl/app/uploads/2024/09/Informe-Sanitario-ANO-2023.pdf>].
- Yuksel, S., Thompson, K., Ellis, A. & Adams, A. 2021. Purification of *Piscirickettsia salmonis* and associated phage particles. *Dis. Aquat. Organ.*, 44: 231-235.