

## Second Laureate Research & Development

- **Project Title:** Setting up the Bivalent Newcastle (La Sota) and Infectious Bronchitis (H - 120) vaccine production
- **Researcher:** Shahin Masoudi (Ph.D.)
- **Collaborating Organization:** Razi Vaccine & Research Institute
- **Collaborators:** M.M.Ebrahimi, M. Moghadampour, Z.Mojahedi, S. Shahsavandi



### Abstract:

Newcastle disease (ND) and infectious bronchitis are important diseases in poultry industry which cause significant economic losses in most part of the world. Therefore production of vaccines with more efficiency and fewer side effects are needed. Due to imports of the bivalent ND (La Sota)+IB (H - 120) live vaccine against these two important diseases of poultry industry and considering that these vaccines has drawn the attention of poultry owners because of their advantages such as removal of vaccine stress, less mortality, time and cost and removal of other adverse factors, production of this vaccine has important economic aspect in the country. In this study, the vaccine was made in accordance with international standards. The viral seeds of La-Sota strain of Newcastle and H - 120 strain of infectious bronchitis virus were propagated in SPF embryonated eggs separately. After the sterility and titer of harvested viruses were controlled, formulation and optimization of the amount of each two viruses in vaccine were performed based on their titer to meet the requested minimum dose. The vaccine was validated with respect to safety, potency and efficacy according to quality control tests. It was concluded that the vaccine can induce sufficient immune response in SPF and commercial chickens and can be useful in the control of Newcastle and Infectious bronchitis diseases. The bivalent ND (La Sota)+IB (H - 120) live vaccine was certified by Veterinary Organization, received product license for mass production and is currently produced on an industrial scale.

