

### Article-Based Observation

Directions: Read the article "[New 'rules' for finding antibiotics](#)," and then answer these questions:

1. Why are bacteria called gram-negative or gram-positive? What is special about a gram-negative bacterium's structure that affects its interaction with an antibiotic?
2. What has been the traditional way to learn how antibiotics cross the bacterial barrier? What situation has provided extra motivation for advances in drug development?
3. What is a porin, and why are they important for antibiotic design?
4. What did chemical biologist Paul Hergenrother and his group do to learn about porin passage?

