

Ardea Biosciences, Inc./DE
 Form 424B3
 February 20, 2009

**PROSPECTUS SUPPLEMENT No. 1
 (TO PROSPECTUS DATED JANUARY 20, 2009)**

**Filed Pursuant to Rule 424(b)(3) under the
 Securities Act of 1933 in connection with
 Registration No. 333-156708**

**ARDEA BIOSCIENCES, INC.
 COMMON STOCK**

This prospectus supplement No. 1 supplements and amends the prospectus dated January 20, 2009, which is referred to herein as the Prior Prospectus, relating to the resale from time to time of up to 3,421,668 shares of our common stock by the selling stockholders named in the Prior Prospectus and the selling stockholders donees, pledgees or successors. Of the shares, 2,737,336 were issued pursuant to a private placement that closed on December 19, 2008, and an additional 684,332 shares are issuable upon the exercise of warrants sold in the private placement which are first exercisable beginning June 17, 2009 and expire on December 19, 2013.

This prospectus supplement should be read in conjunction with the Prior Prospectus, which is to be delivered with this prospectus supplement. This prospectus supplement is not complete without, and may not be delivered or utilized except in connection with, the Prior Prospectus, including any amendments or supplements thereto.

We are filing this prospectus supplement to reflect the transfer by each of Visium Balanced Fund, LP, Visium Balanced Offshore Fund, Ltd., Visium Long Bias Offshore Ltd., and Visium Long Bias Fund, LP, to Visium Balanced Master Fund, Ltd. of certain shares, warrants and the shares that are issuable upon exercise of such warrants, registered for such entities for resale pursuant to the Prior Prospectus, effective January 20, 2009. This prospectus supplement does not impact any other selling stockholders set forth in the table appearing under the caption Selling Stockholders on pages 18 to 20 of the Prior Prospectus, which we refer to herein as the Selling Stockholder Table.

The Selling Stockholder Table is hereby amended and supplemented by (i) deleting the references therein to Visium Balanced Fund, LP, Visium Balanced Offshore Fund, Ltd., Visium Long Bias Offshore Ltd., and Visium Long Bias Fund, LP, and the shares, warrants and the shares that are issuable upon exercise of such warrants, held by such entities as well as the contents of footnotes (11) and (12) and (ii) adding the stockholder identified in the table below and the related footnote set forth below. For purposes of this prospectus supplement, the applicable percentage of ownership shown below is based on 17,835,734 shares of our common stock outstanding as of December 31, 2008.

| Name | Shares of Common Stock Owned Prior to Offering | Number of Shares Being Offered | Shares Owned After Offering | |
|---------------------------------------|---|---|-----------------------------------|---------|
| | | | Number | Percent |
| Visium Balanced Master Fund, Ltd.(17) | 1,220,296 | 307,708 | 974,129 | 5.46% |

(17) Number of shares being offered includes 61,541 shares of common stock issuable upon the exercise of warrants acquired in the Private Placement.

Information contained in this prospectus supplement regarding selling stockholders is based on information provided by or on behalf of the selling stockholders, and may change over time.

Investing in our common stock involves a high degree of risk. You are urged to read the section entitled Risk Factors beginning on page 5 of the Prior Prospectus, as well as the section entitled Risk Factors included in our recent quarterly and annual reports filed with the Securities and Exchange Commission, which describe specific risks and other information that should be considered before you make an investment decision.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this Prospectus Supplement is February 20, 2009.