ARCA BIOPHARMA, INC.

COMPLAINT AND INVESTIGATION POLICY AND PROCEDURE

As amended on March 14, 2007

POLICY

Policy for Treatment, Submission and Investigation of Complaints

- 1. It is the policy of ARCA biopharma, Inc. ("ARCA") to treat complaints about violations of ARCA's policies, and violations of applicable laws and regulations, seriously and expeditiously. ARCA's policies, such as ARCA's Code of Business Conduct and Ethics, require employees to comply with applicable laws and regulations, including, for example, laws and regulations relating to trading in securities, fraud, conflicts of interest, the development and manufacture of drugs, advertising and promotion, equal employment opportunity, unlawful harassment, anti-trust, and fair competition. All employees have an obligation to understand and comply with ARCA's policies and applicable laws and regulations.
- 2. For the purposes of this Complaint and Investigation Policy and Procedure ("Policy and Procedure"), a complaint about accounting, internal accounting controls, auditing matters, or deceptive financial practices, including but not limited to fraud against investors, securities fraud, mail or wire fraud, bank fraud, or inaccurate statements to the SEC or members of the investing public, is referred to as a "Financial and Disclosure Complaint." A complaint about a violation of an ARCA policy or of an applicable law or regulation that is not a Financial and Disclosure Complaint is referred to in this Policy and Procedure as a "Non-Financial Complaint." Financial and Disclosure Complaints and Non-Financial Complaints are referred to in this Policy and Procedure collectively as "Complaints."
- 3. Employees will be given the opportunity to submit confidential Complaints for review by representatives of ARCA. An employee also may submit Complaints directly to his or her supervisor. ARCA will take reasonable steps to protect the confidentiality and anonymity of the employee when so requested, to the extent that anonymity is consistent with ARCA's obligation to investigate Complaints thoroughly and to take disciplinary or corrective action to prevent recurrence of any misconduct.
- 4. Complaints will be investigated by persons who have sufficient familiarity with the subject area to conduct an effective investigation.
- 5. ARCA's Compliance Officer will supervise the receipt, documentation, and investigation of Complaints. ARCA's Compliance Officer reports directly to the CEO and Board of Directors of ARCA, and keeps the CEO and Board of Directors regularly informed of the status of Complaints.

6. If ARCA contracts with a third party to handle Complaints, the third party will comply with this Policy and Procedure.

Non-Retaliation Policy

No employee will be discharged, demoted, suspended, threatened, or harassed as a result of lawfully submitting a Complaint under this Policy and Procedure if the employee acts lawfully and reasonably believes that the Complaint involves a violation of an applicable law or regulation or a violation of any of ARCA's policies.

PROCEDURE

Procedure for Submitting a Confidential Complaint

- 1. This Policy and Procedure allows employees to submit confidential Complaints. These Complaints may be made anonymously but ARCA encourages employees to disclose their names with the understanding that ARCA's non-retaliation policy will apply. This Policy and Procedure, which expressly states ARCA's non-retaliation policy, is located in an area accessible to all employees.
- 2. Employees may submit Complaints on ARCA's intranet site at http://*. An employee submitting this information need not leave his or her name or other personal information, though ARCA encourages each employee to do so. If the Complaint is a Financial and Disclosure Complaint, the employee must designate, in accordance with the instructions on ARCA's intranet site, that the Complaint is a Financial and Disclosure Complaint. Any Complaint which is not designated as a Financial and Disclosure Complaint will be treated as a Non-Financial Complaint. An employee also may submit a Complaint directly to his or her supervisor, who will report it to the Compliance Officer. The investigation that follows the submission of a Complaint will be conducted in a manner that takes reasonable steps to protect the confidentiality and anonymity of the employee submitting the Complaint, to the extent anonymity is consistent with ARCA's obligation to investigate complaints thoroughly and to take disciplinary or corrective action to prevent recurrence of any misconduct.

Procedure for the Receipt, Treatment and Investigation of Complaint

1. Any Complaint made in accordance with this Policy and Procedure, whether a Financial and Disclosure Complaint or a Non-Financial Complaint, shall be immediately directed to ARCA's Compliance Officer. If the employee has designated, in accordance with the instructions on ARCA's intranet site, that the Complaint is a Financial and Disclosure Complaint, the Complaint also shall be immediately directed to the Chairperson of the Audit Committee, who is an independent director of ARCA's Board of Directors. If the employee does not designate the Complaint as a Financial and Disclosure Complaint, the

_

^{*}Information redacted.

Complaint also shall be immediately directed to the Chairperson of the Nominating and Corporate Governance Committee, who is an independent director of ARCA's Board of Directors. If the employee also has designated, in accordance with the instructions on ARCA's intranet site, that the Complaint relates to misconduct on the part of the Compliance Officer, the Complaint also shall be immediately directed to ARCA's Chief Executive Officer. If a Complaint is submitted directly to an employee's supervisor, the Compliance Officer will determine whether the Complaint is a Financial and Disclosure Complaint or a Non-Financial Complaint, and will direct the Complaint as provided above.

- 2. Promptly after receipt of a Complaint, the Compliance Officer shall review the Complaint, and may assign someone outside of ARCA with familiarity with the type of Financial and Disclosure Complaint or Non-Financial Compliant at issue to investigate the Complaint. The Compliance Officer may direct that the investigator work at the direction of or in conjunction with an ARCA attorney in the course of the investigation. If a Financial and Disclosure Complaint contains a credible allegation of actual or potential ongoing criminal wrongdoing, the Compliance Officer shall immediately contact the Audit Committee Chairperson and fully inform him or her of the Complaint. If a Non-Financial Complaint contains a credible allegation of actual or potential ongoing criminal wrongdoing, the Compliance Officer shall immediately contact the Nominating and Corporate Governance Committee Chairperson and fully inform her or him of the Complaint. In such cases, the Compliance Officer will establish a procedure for investigating the Complaint, which may include retaining outside counsel. The procedure chosen by the Compliance Officer shall be consistent with ARCA's desire to investigate thoroughly any Complaint. If a Complaint alleges misconduct by the Compliance Officer, ARCA's Chief Executive Officer, in consultation with ARCA's outside counsel, will establish a procedure for investigating the Complaint.
- 3. Unless other instructions are provided by the Compliance Officer, or by the Chief Executive Officer in the case of a Complaint alleging misconduct by the Compliance Officer, the person assigned to investigate and conduct a thorough investigation of the Complaint shall report his or her findings or recommendations to the Compliance Officer as promptly as possible, consistent with the obligation to conduct a thorough investigation. The report will be documented. If the investigator is in a position to recommend appropriate disciplinary or corrective action, the investigator also should recommend disciplinary or corrective action.
- 4. If necessary, the person assigned to the investigation, or the Compliance Officer, shall obtain additional resources that may be necessary to conduct the investigation, including retaining outside counsel and/or expert witnesses.
- 5. At least once per each calendar quarter and whenever else as deemed necessary, the Compliance Officer shall submit to the Audit Committee and the Chief Financial Officer of ARCA a report that summarizes each Financial and Disclosure Complaint made within the last calendar quarter and shows specifically: (a) the complainant (unless anonymous, in which case the report will so indicate), (b) a detailed description of the substance of the

Financial and Disclosure Complaint, (c) the status of the investigation, (d) any conclusions reached by the investigator, and (e) findings and recommendations. The Compliance Officer also shall provide a summary of the Compliance Officer report on Financial and Disclosure Complaints to the Board at each regularly scheduled Board meeting.

- 6. At least once per each calendar quarter and whenever else as deemed necessary, the Compliance Officer shall submit to the Nominating and Corporate Governance Committee and the Chief Executive Officer of ARCA a report that summarizes each Non-Financial Complaint made within the last calendar quarter and shows specifically: (a) the complainant (unless anonymous, in which case the report will so indicate), (b) a detailed description of the substance of the Non-Financial Complaint, (c) the status of the investigation, (d) any conclusions reached by the investigator, and (e) findings and recommendations. The Compliance Officer also shall provide a summary of the Compliance Officer report on Non-Financial Complaints to the Board at each regularly scheduled Board meeting.
- 7. ARCA's Compliance Officer shall also, upon request, provide a summary of Financial and Disclosure Complaints to ARCA's external auditors.
- 8. At any time with regard to any Complaint other than a Complaint alleging misconduct by the Compliance Officer, the Compliance Officer may specify a different procedure for investigating and treating such a Complaint, such as when the Complaint concerns pending litigation. The procedure chosen by the Compliance Officer shall be consistent with ARCA's desire to investigate thoroughly any Complaint.

Retention of Records

All Complaints and documents relating to such Complaints made through the procedures outlined above shall be retained for at least five years from the date of the Complaint, after which the information may be destroyed unless the information may be relevant to any pending or potential litigation, inquiry, or investigation or further retention of the Complaint is required by applicable law, in which case the information may not be destroyed and must be retained for the duration of that litigation, inquiry, or investigation, or applicable law requirement, and thereafter as necessary.