Avinger Inc Form SC 13G February 18, 2016

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Amendment No.)*

Avinger, Inc.

(Name of Issuer)

Class A Common Stock, \$0.001 par value per share

(Title of Class of Securities)

053734109

(CUSIP Number)

December 31, 2015

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- o Rule 13d-l(b)
- o Rule 13d-l(c)
- x Rule 13d-l(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. 053734109

- 1. Names of Reporting Persons. John B. Simpson PH.D. M.D.
- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 -)
 - (b) x
- 3. SEC Use Only
- 4. Citizenship or Place of Organization

United States of America

5. Sole Voting Power

867,179 (See Item 4(a) below)

Number of Shares

6. Shared Voting Power

1,592,216 (See Item 4(a) below)

Beneficially Owned by

1,392,210 (See Item 4(a) below)

Each

7.

8.

Sole Dispositive Power 867,179 (See Item 4(a) below)

Reporting Person With:

Shared Dispositive Power 1,592,216 (See Item 4(a) below)

- 9. Aggregate Amount Beneficially Owned by Each Reporting Person 2,459,395 (See Item 4(a) below)
- 10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) o
- 11. Percent of Class Represented by Amount in Row (9) 19.5% (See Item 4(b) below)
- 12. Type of Reporting Person (See Instructions)
 IN

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Item 1.		
	(a)	Name of Issuer:
		Avinger, Inc.
	(b)	Address of Issuer s Principal Executive Offices:
		400 Chesapeake Drive
		Redwood City, CA 94063
Item 2.		
	(a)	Name of Person Filing:
		John B. Simpson Ph.D. M.D.
	(b)	Address of Principal Business Office or, if none, Residence:
		c/o Avinger, Inc.
		400 Chesapeake Drive
		Redwood City, CA 94063
	(c)	Citizenship:
		John B. Simpson is a U.S. citizen
	(d)	Title of Class of Securities:
		Common Stock, \$0.001 par value per share
	(e)	CUSIP Number:
		053734109
Item 3.	If this statement is filed pursuant Not applicable.	to Rules 13d-1(b), or 13d-2(b) or (c), check whether the person filing is a:
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Item 4. Ownership.

(a) Amount beneficially owned:

As of December 31, 2015 (i) 41 shares of Common Stock were held of record by Dr. Simpson, (ii) 867,138 shares subject to options to purchase Common Stock that were fully exercisable within 60 days of December 31, 2015 were held of record by Dr. Simpson, (iii) 1,164,289 shares of Common Stock were held of record by the Simpson Family Trust Dated 1/12/90, for which Dr. Simpson and his spouse serve as trustees, (iv) 222,220 shares subject to warrants to purchase Common Stock were held of record by the Simpson Family Trust Dated 1/12/90, for which Dr. Simpson and his spouse serve as trustees, (v) 47,618 shares of Common Stock were held of record by Dr. Simpson s spouse, (vi) 33,332 shares subject to warrants to purchase Common Stock were held of record by Dr. Simpson s spouse and (vii) 124,757 shares of Common Stock were held of record by Foxhollow ACLP, for which Dr. Simpson serves as a General Partner.

(b) Percent of class:

19.5%

The ownership percentage above is calculated based on 12,643,538 shares of Common Stock outstanding as of December 31, 2015, as reported by the issuer to the reporting person.

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote

867,179

(ii) Shared power to vote or to direct the vote

1.592,216

(iii) Sole power to dispose or to direct the disposition of

867,179

(iv) Shared power to dispose or to direct the disposition of

1,592,216

Item 5. Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following o.

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

Not applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent

Holding Company or Control Person.

Not applicable.

Item 8. Identification and Classification of Members of the Group.

Not applicable.

Item 9. Notice of Dissolution of Group.

Not applicable.

Item 10. Not applicable.	Certifications.		
This Schedule 13G is not filed pursuant to Rule 13d-1(b) or Rule 13d-1(c).			
	SIGNATURE		
After reasonable inquiry and to the best of my knowledge and belief, I hereby certify that the information set forth in this statement is true, complete and correct. DATED: February 17, 2016			
	/s/ John B. Simpson		
	John B. Simpson		
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