

# FORM 3

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

### OMB APPROVAL

OMB Number: 3235-0104  
 Expires: November 30, 2011  
 Estimated average burden hours per response... 0.5

### INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person * Rooke Andrew K.		2. Date of Event Requiring Statement (Month/Day/Year) 02/27/2012		3. Issuer Name <b>and</b> Ticker or Trading Symbol MRI INTERVENTIONS, INC. [NONE]	
(Last) (First) (Middle) C/O MRI INTERVENTIONS, INC., ONE COMMERCE SQUARE, SUITE 2550		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner <input type="checkbox"/> Officer <input type="checkbox"/> Other (give title below) (specify below)		5. If Amendment, Date Original Filed(Month/Day/Year)	
(Street) MEMPHIS, TN 38103				6. Individual or Joint/Group Filing(Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person	
(City) (State) (Zip)					

#### Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Common Stock	186,304	I	By trust
Common Stock	186,304	I	By trust
Common Stock	186,304	I	By trust
Common Stock	186,304	I	By trust
Common Stock	104,077	I	By trust
Common Stock	104,077	I	By trust
Common Stock	104,077	I	By trust
Common Stock	104,077	I	By trust
Common Stock	104,077	I	By trust
Common Stock	104,077	I	By trust
Common Stock	104,077	I	By trust
Common Stock	104,077	I	By trust
Common Stock	104,077	I	By trust
Common Stock	260,102	I	By Withington Foundation

Common Stock	500,000	I	By Payne Partners LLC
Common Stock	2,058,207	I	By Rooke Fiduciary Management

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

SEC 1473 (7-02)

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

**Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Warrants (right to buy)	(1)	06/30/2013	Common Stock	400,000	\$ 0.01	I	By Rooke Fiduciary Management
Warrants (right to buy)	(1)	07/27/2013	Common Stock	400,000	\$ 0.01	I	By Rooke Fiduciary Management
Warrants (right to buy)	(1)	08/29/2013	Common Stock	125,000	\$ 0.01	I	By Rooke Fiduciary Management

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Rooke Andrew K. C/O MRI INTERVENTIONS, INC. ONE COMMERCE SQUARE, SUITE 2550 MEMPHIS, TN 38103	X	X		

## Signatures

/s/ Oscar Thomas, by power of attorney for Andrew K. Rooke	02/27/2012
Signature of Reporting Person	Date

## Explanation of Responses:

\* If the form is filed by more than one reporting person, see Instruction 5(b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and

15 U.S.C. 78ff(a).

**(1)** The shares subject to this warrant are immediately exercisable.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, See Instruction 6 for procedure.

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