FORM 4

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. *See* Instruction 1(b).

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

OMB	APPROVAL						
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Section 16. Form 4 STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF or Form 5 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 - Conway Bruce C. (Last) (First) (Middle) C/O MRI INTERVENTIONS, INC., ONE COMMERCE SQUARE, SUITE 2550							5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Officer (give title below)Other (specify below)			
					ansactio	n				
(Street) MEMPHIS, TN 38103					te Origin	al	6. Individual or Joint/Group Filing(Check Applicable Line) _X_ Form filed by One Reporting Person Form filed by More than One Reporting Person			
(City) (State) (Zip) Table I - Non-Derivative Securities Acquired, Disposed of, or Owned								sed of, or Be	eneficially	
2. Transaction Date (Month/Day/Year)	Execution any	Date, if	Code	ion	Acquire Dispose	cquired (A) or visposed of (D)		5. Amount of Securities Beneficially Owned Following	6. Ownership Form: Direct (D) or Indirect	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	v	Amount	(A) or (D)	Price	Reported Transaction(s) (Instr. 3 and 4)	(I) (Instr. 4)	
09/12/2012			Р		4,750	A	\$ 2.05	239,000 <mark>(5)</mark>	1	By spouse
09/12/2012			Ρ		2,500	A	\$ 2.082 <u>(1)</u>	16,000	I	By Gordon McShane Trust for Chase T. Conway (2)
09/12/2012			Ρ		2,500	А	\$ 2.10	16,000	I	By Gordon McShane Trust for Alden M. Conway ⁽³⁾
09/12/2012					2,500	A	\$ 2.05	16,000	I	By Gordon McShane Trust for Merritt E. Conway (4
09/13/2012			Ρ		1,500	A	\$ 2.05	15,500	I	By Edna N Conway Irrevocable Trust FBO Chase T. Conway
09/13/2012			Ρ		2,500	A	\$ 2	16,500	I	By Edna N Conway Irrevocable Trust FBO Alden M. Conway
09/13/2012			Ρ		2,500	A	\$ 2.02	16,500	I	By Edna N Conway Irrevocable Trust FBO Merritt E. Conway
								1,918,518	D <u>(6)</u>	
								406,137	I	By Alden M. Conway Trust
								406,137	I	By Chase T. Conway Trust
	d Address of Repor ruce C. (First) COMMERCE S 50 (Street) , TN 38103 (State) 2. Transaction Date (Month/Day/Year) 09/12/2012 09/12/2012 09/12/2012 09/12/2012	d Address of Reporting ruce C. (First) (Middle) NTERVENTIONS, COMMERCE SQUARE, 50 (Street) , TN 38103 (State) (Zip) 2. Transaction Date (Month/Day/Year) 09/12/2012 09/12/2012 09/12/2012 09/12/2012 09/12/2012 09/12/2012 09/12/2012 09/13/2012	d Address of Reporting ruce C. (First) (Middle) NTERVENTIONS, COMMERCE SQUARE, COMMERCE SQUARE, (Month/ COMMERCE SQUARE, (Month/ (Street) (Zip) Table 2. Transaction Date (Month/Day/Year) 09/12/2012 09/12/2012 09/12/2012 09/12/2012 09/12/2012 09/12/2012 09/12/2012 09/12/2012 09/12/2012 09/12/2012 09/13/2012	d Address of Reporting ruce C. 2. Issuer Name Symbol MRI INTERVEI [MRIC] (First) TERVENTIONS, COMMERCE SQUARE, COMMERCE SQUARE, COMMERC	Address of Reporting ruce C. 2. Issuer Name and Symbol MRI INTERVENT INTERVENTIONS, COMMERCE SUARE, COMMERCE SUA	Address of Reporting ruce C. 2. Issuer Name and Ticker of Symbol MRI INTERVENTIONS, II (MRIC) (First) (Middle) NTERVENTIONS, COMMERCE SQUARE, 3. Date of Earliest Transaction (Month/Day/Year) 09/12/2012 (State) (Zip) 2. Transaction Date (Month/Day/Year) 3. It Amendment, Date Origin Filed(Month/Day/Year) 2. Transaction Date (Month/Day/Year) 3. Transaction Code (Instr. 8) 4. Secul Acquire Dispose (Instr. 8) 09/12/2012 P 4.750 09/12/2012 P 4,750 09/12/2012 P 2,500 09/12/2012 P 2,500 09/12/2012 P 2,500 09/12/2012 P 1,500 09/13/2012 P 2,500	1 Address of Reporting ruce C. 2. Issuer Name and Ticker or Traspection (MRI INTERVENTIONS, INC. (MRIC) (First) (Middle) (Middle) (Middle) (Month/Day/Year) (09/12/2012 3. Date of Earliest Transaction (Month/Day/Year) (09/12/2012 (Street) (Street) (Street) (Street) (Street) (Street) 2. Deemed Execution Date, if (Month/Day/Year) (Month/Day/Year) 3. 4. Securities Securities Securities (Instr. 8) (State) (2ip) (Month/Day/Year) (Month/Day/Year) 2. Deemed Execution Date, if (Month/Day/Year) 3. 4. Securities Acquired (A Disposed of (Instr. 8)) 09/12/2012 (Month/Day/Year) P 4. Securities (Instr. 8)) (A) or (Day Mean) 09/12/2012 (Month/Day/Year) P 4. Securities (Instr. 8)) (A) or (Day Mean) 09/12/2012 (Month/Day/Year) P 4. Securities (Instr. 8)) (A) or (Day Mean) 09/12/2012 (Month/Day/Year) P 2.5000 A 09/12/2012 (Month/Day/Year) P 2.5000 A 09/13/2012 (Month/Day/Year) P 1.500 A 09/13/2012 (Month/Day/Year) P 2.5000 A	a Address of Reporting ruce C. 2. Issuer Name and Ticker or Trading Symbol MRI INTERVENTIONS, INC. IMRIC] (First) (Middle) NTERVENTIONS, COMMERCE SQUARE, 09/12/2012 3. Date of Earliest Transaction (Month/Day/Year) 09/12/2012 (Street) 4. If Amendment, Date Original Filed(Month/Day/Year) (Street) 4. If Amendment, Date Original Filed(Month/Day/Year) (Street) 2. Deemed Execution Date, if Transaction Date (Month/Day/Year) 3. Code (Instr. 8) 4. Securities Acquired (A) or Disposed of (D) (Instr. 3. 4 and 5) 09/12/2012 P 4.750 A \$ 2.05 09/12/2012 P 4.750 A \$ 2.082 (1) 09/12/2012 P 2,500 A \$ 2.082 (1) 09/12/2012 P 2,500 A \$ 2.05 09/12/2012 P 2,500 A \$ 2.05 09/12/2012 P P 1,500 A \$ 2.05 09/13/2012 P P 1,500 A \$ 2.05	3 Address of Reporting ruce C. 2. Issuer Name and Ticker or Trading Symbol 5. Relationship Issuer (Chec (MRIIC) (Find) NTERVENTIONS, COMMERCE SOUARE, 09/12/2012 3. Date of Earliest Transaction (Month/Day/Year) 5. Relationship Issuer (Chec (Mark)) (Siter) (Mdd) 09/12/2012 6. Individual or Disposed (Ch) Code 6. Individual or Disposed (Ch) Code 2. Transaction Date (Month/Day/Year) 2. A Deerred Execution Date, IT Transaction Code 1. Securities (Month/Day/Year) 5. Amount of Securities (Instr. 3. 4 ard 5) 2. Transaction Date (Month/Day/Year) 2. A Deerred Execution Date, IT Transaction Code 1. Securities (Instr. 3. 4 ard 5) 5. Amount of Securities (Instr. 3. 4 ard 5) 09/12/2012 P 4. Securities (Instr. 3. 4 ard 5) 5. Amount of Securities (Instr. 3. 4 ard 5) 09/12/2012 P 4. Securities (Instr. 3. 4 ard 5) 239,000 (5) 09/12/2012 P 2.500 A \$.062 09/12/2012 P 2.500 A \$.052 16,000 09/12/2012 P 1.500 A \$.052 16,000 09/13/2012 P 2.500 A \$.2.05 16,500 09/13/2012 P 2.500 A \$.2.02 16,500 09/13/2012 P 2.500 A \$.2.02 16,500 09/13/2012 <	3 Address of Reporting ymbol (First) 2. Issuer Name and Ticker or Trading Symbol (Treek all applica (Some) 5. Relationship of Reporting (Some) (First) (Middo) (Month/Day/Year) 3. Sube of Earlier (Some) 5. Relationship of Reporting (Some) (Some) 4. If Amendment, Date O'try Year) 6. Individual or Joint/Group Applicable Ling (Some) 4. If Amendment, Date O'try Year) 6. Individual or Joint/Group Applicable Ling (Some) 4. If Amendment, Date O'try Year) 6. Individual or Joint/Group Applicable Ling (Some) 2. Transation (Month/Day/Year) 7. Toble I- Non-Det-Utry Year) 6. Sometring (Sometry Year) 2. Transation (Month/Day/Year) 2. Deemed (Instr. 3. and 4) 4. SourTites (Instr. 3. and 4) 5. Annound 0) 09/12/2012 P 1. 4.750 A. \$2,05 2000/100 09/12/2012 P 2. 5000 A. \$2,05 16,000 09/12/2012 P 2.5000 A. \$2,05 16,000 1 09/13/2012 P 2.5000 A. \$2,05 16,000 1 09/13/2012 P P 2.5000 A. \$2,05 16,000 1 09/13/2012 P P 2.5000 A. \$2,05 16,000 1 09/13/2012 P P 2.5000 A. \$2,05 16,500 1

Stock					406,137	I	E. Conwa Trust	у		
Common Stock					25,000	1	By Conwa Family GST Trus			
Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.										
Persons who respond to the collection of SEC 1474 information contained in this form are not (9-02) required to respond unless the form displays a currently valid OMB control number.										
Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)										
1. Title of 2. Derivative Conversion	3. Transaction	3A. Deemed Execution Date, if	4.	5.	6. Date Exerc			8. Price of 9. Number of Derivative Derivative	10. Ownership	11. Nature

Derivative	Conversion	Date	Execution Date, if	Transacti	on	Num	ber	and Expirati	on Date	Amo	unt of	Derivative	Derivative	Ownership	of Indirect
Security	or Exercise	(Month/Day/Year)	any	Code		of		(Month/Day/	Year)	Unde	erlying	Security	Securities	Form of	Beneficial
(Instr. 3)	Price of		(Month/Day/Year)	(Instr. 8)		Deriv	ative			Secu	irities	(Instr. 5)	Beneficially	Derivative	Ownership
	Derivative					Secu	rities			(Instr	. 3 and		Owned	Security:	(Instr. 4)
	Security					Acqu	ired			4)			Following	Direct (D)	
						(A) o	r						Reported	or Indirect	
						Dispo	osed						Transaction(s)	(I)	
						of (D))						(Instr. 4)	(Instr. 4)	
						(Instr	.3,								
						4, an	d 5)								
											Amount				
								Data	Evolution		or				
								Date	Expiration Date	Title	Number				
								Exercisable	Dale		of				
				Code	٧	(A)	(D)				Shares				

Reporting Owners

Depending Oursey Name / Address	Relationships						
Reporting Owner Name / Address	Director	10% Owner	Officer	Other			
Conway Bruce C. C/O MRI INTERVENTIONS, INC. ONE COMMERCE SQUARE, SUITE 2550 MEMPHIS, TN 38103	х						

Signatures

/s/ Oscar Thomas, by power of attorned	09/14/2012	
-Signature of Reporting Pe	Date	

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 4(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) This price is a weighted average price. The shares were purchased in two separate transactions: 500 shares at \$2.05; and 2,000 shares at \$2.09.
- (2) These shares are held in trust for the benefit of the reporting person's child. The reporting person's spouse is trustee of the trust.
- (3) These shares are held in trust for the benefit of the reporting person's child. The reporting person's spouse is trustee of the trust.
- (4) These shares are held in trust for the benefit of the reporting person's child. The reporting person's spouse is trustee of the trust.
- (5) Includes 1,500 shares held through an IRA.
- (6) Includes 32,891 shares held jointly with spouse, and 4,950 shares held in an IRA.

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

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