Richard A. Hillstead, Ph.D., FAHA 3 Lukes Path Jasper, GA. 30143

Abbreviated Curriculum Vitae (01/16)

Office: 678-454-6166 Cell: 770-241-6100 rick@hillstead.com

Professional Experience:

Richard A. Hillstead Inc. Founder, President & CEO 2008 –

Richard A. Hillstead Inc. is a privately owned consulting business that focuses on Medical Device Design Innovation.

Services include product development guidance and leadership through all phases of executing a successful R&D program in the highly regulated field of medical device development. Providing expertise on product development from concept through sales release with particular emphasis on capturing and leveraging intellectual property. Additionally, RAH Inc provides expert witness services in the medical device space specializing in catheter enabled technologies, and other interventional medical devices. RAH Inc is a certified US Government contractor with CCR, ORCA, and DUNS registrations on file.

Awards: Georgia Bio Industry Growth Award 2019:

https://www.businesswire.com/news/home/20190122005661/en/Georgia-Bio-Celebrate-30-Years-Annual-Awards

Current and Recent Affiliations:

Emory University - New Technology Advisory Board Member: 2012-

Entrepreneur in Residence – United States Food and Drug Administration (CDRH) 2012-2013

Georgia Venture Partners: Partner 2008 –

Biofisica, Inc: Chairman 2009 -

Accuitive Medical Ventures I: Affiliate Member: 2004 – (currently inactive member)

Accuitive Medical Ventures II: Member: 2007 – (currently inactive member)

Epitek: Board of Directors: 2006 - 2010

The Innovation Factory: Founding Member & Chief Science Officer 1999 – 2008 - Responsibilities included early stage research, product development engineering, and competitive product analysis. The Innovation Factory (TIF) is a privately funded medical device incubator/accelerator located in Duluth Ga. TIF seeks out promising new technologies, negotiates a license, funds the new venture through early clinical studies, refines product designs, develops intellectual property, and ultimately launches the fledgling project into a venture funded company. Companies Created:

Neuronetics – Co-founder, IP diligence and tech transfer from Emory, led in-house R&D effort Cerebral Vascular Applications (CVA) – Co-founder and Chairman of the Board, Inventor Liposonix – Co-founder and Project Leader from inception through early animals, Inventor Acufocus – Co-founder, led initial IP diligence, early deal structure/negotiations Cellutions – Co-founder, IP Diligence, Managed Technical R&D team and early clinicals Neovista – Co-founder, Inventor, led technical aspects of R&D, licensing, prototyping Osteolign – Co-founder, inventor, Project Leader, all aspects of R&D and device prototyping Aquesis – Co-founder, negotiated license out of University of Western Australia, Perth



(Details regarding above companies available upon request)

Experience continued:

Novoste Corporation: Director, New Technology 1996 – 1999

Novoste Corporation: Director, Intravascular Brachytherapy Catheter Project 1993 – 1996

Novoste Corporation is a world leader in devices used for the treatment of vascular disease through the use of interventional brachytherapy, a catheter based technology.

Cordis Corporation: Manager, Product Development, Catheter Sheaths & Accessories 1992 - 1993

Cordis Corporation: Sr. Product Development Engineer, Custom Products 1990 -1992

Cordis Corporation: Sr. Research Engineer, Corporate Research (Stents/Cardiology) 1988 - 1990

Cordis Corporation: Prod Dev Engineer, Cardiology Catheters and Accessories 1987 -1988

Cordis Corporation (Johnson & Johnson) is a world leader in developing and marketing devices and catheters for use in

transcutaneous procedures. (Details regarding above companies available upon request)

Education:

2003 - Ph.D., Business Administration, Southwest University, Kenner, LA.

1992 - Master of Business Administration, Nova Southeastern University, Ft. Lauderdale, Fl.

1990 - Bachelor of Science, Professional Mgt., Nova Southeastern University, Ft. Lauderdale, FL

1974 - Associate in Art, Mechanical Engineering, Miami-Dade Community College, Miami, FL.

America Heart Association Fellowships and Certificates: (Golden Heart Member)

Council on Clinical Cardiology - Fellow

Council on Cardiometabolic Health – Fellow

Stroke Council – Member

Advanced Disaster Life Support (ADLS) Current Certification

Advanced Cardiovascular Life Support (ACLS) Previous Certification

Recent Presentations:

Georgia Life Sciences Summit 2018:

Georgia Life Sciences Summit 2017:

Georgia Life Sciences Summit 2016: http://www.georgiabiosummit.org/postersession

Georgia Life Sciences Summit 2015: http://www.gabiosummit2015.com/#!postersession/c4mu

Georgia Life Sciences Summit 2014: http://www.gabio.org/page/Summit2014poster/

Georgia Life Sciences Summit 2013: http://www.youtube.com/watch?v=YbHwFPWdlwQ

Georgia Life Sciences Summit 2011: http://www.informedhorizons.com/summit2011/Rick_Hillstead.html

Surgical Innovation Convention 2011: http://www.surginvent.gatech.edu/instructor-bios
UrologicInvention Convention 2010: http://uroinvent2010.gatech.edu/faculty-biographies

Stanford BioDesign Innovation 2008:

http://www.stanford.edu/group/biodesign/emergingentrepreneurs/speakers.htm



Selected Publications:

Textbook Chapters:

Vascular Brachytherapy: Edited by R. Waksman, SB King, IR Crocker & RF Mould, Published by Nucletron 1996, Chapter 34, Novoste Intracoronary Radiation System: A Novel Approach to Preventing Restenosis by *Richard A. Hillstead* & Thomas D. Weldon

Handbook of Vascular Brachytherapy: Edited by Ron Waksman and Patrick W Serruys, Published by Martin Dunitz LTD., 1998 Chapter 7, <u>The Beta-Cath System</u> by *Richard A. Hillstead* and Cheryl Johnson

Vascular Brachytherapy: Second Edition Edited by R. Waksman MD, Published by Futura Publishing, 1999 Chapter 42, Novoste Beta-Cath Intracoronary Beta Radiation System by *Richard A. Hillstead*

Handbook of Vascular Brachytherapy: **Second Edition** Edited by Ron Waksman and Patrick W Serruys, Published by Martin Dunitz LTD., 2000 Chapter 9, <u>The Beta-Cath System</u> by Raoul Bonan, Richard diMonda and *Richard A. Hillstead*

Selected Journal Publications:

<u>Humanitarian Use Devices/Humanitarian Device Exemptions in Cardiovascular Medicine</u>
Aaron V. Kaplan, Elisa D. Harvey, Richard E. Kuntz, Hadas Shiran, John F. Robb and Peter
Fitzgerald *Circulation* 2005;112;2883-2886 (Acknowledgement)

The effect of endovascular irradiation on platelet recruitment at sites of balloon angioplasty in coronary arteries. Salame M, Verheye S, Mulkey SP, Cui J, Chronos NA, King SB III, Crocker IR,. *Circulation* 1999 (submitted). (Acknowledgement)

Endovascular B-Radiation to Reduce Restenosis After Coronary Balloon Angioplasty Results of the Beta Energy Restenosis Trial (BERT)

Spencer B. King, III, MD; David O. Williams, MD; Prakash Chougule, MD; J. Larry Klein, MD; Ron Waksman, MD; Richard Hilstead, MBA; Joan Macdonald, PhD; Kris Anderberg, RN; ; Ian R. Crocker, MD (*Circulation*. 1998;97:2025-2030.) © 1998 American Heart Association, Inc

Intracoronary low-dose β-irradiation inhibits neointima formation after coronary artery balloon injury in the swine restenosis model. Waksman R, Robinson KA, Crocker IR, Wang C, Gravanis MB, Cipolla GD, Hillstead RA, King SB III. Circulation 1995;92:3025-3031.

Effects of endovascular irradiation on platelet recruitment at sites of balloon angioplasty in pig coronary arteries. Salame M, Lampkin J, Mulkey SP, Cui J, Verheye S, Hillstead RA, Crocker IR, Chronos NAF, King SB III, Robinson KA. *J Am Coll Cardiol* 1999;33(2 Supp A);44A.

Efficacy and safety of β versus γ radioisotopes for endovascular irradiation in prevention of intimal hyperplasia after balloon angioplasty in swine coronaries. Waksman R, Robinson KA, Crocker IR, Wang C, Gravanis MB, Cipolla GD, Hillstead RA, King SB III. . *Circulation* 1995;92(8):I-146.



Intracoronary low dose β particle irradiation inhibits neointima formation after balloon angioplasty of swine coronary arteries. Waksman R, Robinson KA, Crocker IR, Wang C, Gravanis MB, Cipolla GD, Hillstead RA, King SB III. . *Circulation* 1995;92(8):I-146.

The Feasability of Temporary Vascular Stenting

Richard Shlansky-Goldberg, Robert F. LeVeen, **Richard A. Hillstead**, Hospital of the University of Pensylvania, Philadelphia, PA. Presented at The International Congress IV in Scottsdale AZ., Feb 1991

The Feasability of Temporary Vascular Stenting

Richard Shlansky-Goldberg, Robert F. LeVeen, **Richard A. Hillstead**, Constantine Cope, Hospital of the University of Pensylvania, Philadelphia, PA. Presented at The American College of Cardiology 40th Annual Scientific Sessions, Atlanta GA. March 3-7 1991

<u>Temporary Vascular Stenting</u> Richard Shlansky-Goldberg, Robert F. LeVeen, **Richard A. Hillstead**, Constantine Cope, Hospital of the University of Pensylvania, Philadelphia, PA. Presented at The RSNA in Chicago, IL November 26th 1990

A New Flexible Radiopaque Endovascular Stent: Initial Experimental Results

Joseph B. Muhlestein, Peter J. Quigley, Eileen Mikat, David C. MacGregor, **Richard A. Hillstead**, Richard S. Stack. Duke University, Durham, NC. Presented at the 62nd Scientific Sessions of the American Heart Association, New Orleans, LA., November 13-16 1989

A New Flexible Radiopaque Endovascular Stent: Initial Experimental Results and Angiographic Follow-Up

Joseph B. Muhlestein, David C. MacGregor, **Richard A. Hillstead**, Michael D. Colliver, Paul E. deCoriolis, Richard S. Stack. Duke University, Durham, NC. Presented at the Scientific Sessions of the American College of Cardiology, March 19-23 1989

A New Highly Flexible Balloon Expandable Endovascular Stent: Initial Experimental Results with Follow-Up

Peter J. Quigley, Michael H Sketch, David C. MacGregor, Paul E. deCoriolis, **Richard A. Hillstead**, Eileen Mikat, Earl F. Saum, Richard S. Stack. Duke Medical Center, Durham, NC. Presented at the Laser and Stent Therapy in Vascular Surgery International Congress II, Phoenix, AZ., February 10-15 1989



USPTO Issued Patents & Pending Applications Richard A. Hillstead, Ph.D. As of 02/20/2014

Issued US Patents:

	Pat #	Description
1	8,647,363	Robotically controlled hydraulic end effector system
2	8,365,721	Methods and apparatus for intraocular brachytherapy
3	8,308,757	Hydraulically actuated robotic medical instrument
4	8,292,795	Methods and apparatus for intraocular brachytherapy
5	8,043,328	Medical instrument
6	<u>7,951,060</u>	Methods and apparatus for intraocular brachytherapy
7	7,922,742	Medical instrument
8	7,841,984	Ultrasonic treatment and imaging of adipose tissue
9	7,803,103	Methods and apparatus for intraocular brachytherapy
10	<u>7,803,102</u>	Methods and apparatus for intraocular brachytherapy
11	<u>7,744,520</u>	Method and apparatus for intraocular brachytherapy
12	7,563,222	Methods and apparatus for intraocular brachytherapy
13	<u>7,503,474</u>	Medical instrument
14	<u>7,311,656</u>	Automated system for the radiation treatment of a desired area within a patient
15	<u>7,258,674</u>	<u>Ultrasonic treatment and imaging of adipose tissue</u>
16	7,160,238	Method and apparatus for treating a desired area in the vascular system of a patient
17	7,066,873	Automated system for the radiation treatment of a desired area within a patient
18	<u>7,066,872</u>	Method and apparatus for treating a desired area in the vascular system of a patient
19	<u>7,025,716</u>	Intraluminal radiation treatment system
20	<u>6,994,665</u>	Method and apparatus for treating a desired area in the vascular system of a patient
21	<u>6,830,174</u>	Medical instrument
22	6,755,338	Medical instrument
23	6,659,934	Automated system for the radiation treatment of a desired area within a patient
24	<u>6,610,003</u>	Intraluminal radiation treatment system
25	<u>6,503,185</u>	Method and apparatus for treating a desired area in the vascular system of a patient
26	<u>6,458,070</u>	Method and apparatus for treating a desired area in the vascular system of a patient
27	<u>6,306,074</u>	Method and apparatus for radiation treatment of a desired area in the vascular
		<u>system</u>
	6,261,219	Intraluminal radiation treatment system
	6,013,020	Intraluminal radiation treatment system
	<u>5,980,492</u>	Vascular blood containment device
	5,899,882	Catheter apparatus for radiation treatment of a desired area in the vascular system
32	5 820 596	Vascular blood containment device



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