CURRICULUM VITAE

Clay M. Kelly, MD

Physical Medicine and Rehabilitation Louis Stokes Veteran's Administration Medical Center 10701 East Boulevard Cleveland, Ohio 44106

E-mail: clay.kelly@va.gov

APPOINTMENTS

October 14, 2007 to Present Chief of Service

PM&R Residency VA Site Director Physical Medicine and Rehabilitation Louis Stokes VA Medical Center

Cleveland, Ohio

September, 2014 to present Medical Director

Advanced Platform Technology (APT) Center

Louis Stokes VA Medical Center

Cleveland, Ohio

September, 2010 to Associate Medical Director

September 2014 Advanced Platform Technology (APT) Center

Louis Stokes VA Medical Center

Cleveland, Ohio

January 1, 2011 to Present Medical Director - PolyTrauma Amputee

Network Site (PANS)

Louis Stokes VA Medical Center

Cleveland, Ohio

August 1997 to September 2007 Medical Director for Outpatient Rehabilitation

Department of PM&R

MetroHealth Medical Center

Cleveland, Ohio

January 1999 to August 1999 Interim Medical Director

Occupational Medicine Program

Department of PM&R

MetroHealth Medical Center

Cleveland, Ohio

January 1996 to January 1998 Medical Director for Subacute Rehabilitation

MetroHealth Medical Center

Cleveland, Ohio

January 1994 to September 2007 Chief, Amputee Rehabilitation Program

Department of PM&R

MetroHealth Medical Center

Cleveland, Ohio

July 1991 to October 2007 Staff Physiatrist

Department of Physical Medicine and Rehabilitation

MetroHealth Medical Center

Cleveland, Ohio

Academic Appointments

July 1999 to Present Assistant Professor Physical Medicine and

Rehabilitation

Department of Physical Medicine and Rehabilitation

Case Western Reserve University

Cleveland, Ohio

July 1991 to June 1999 Senior Instructor of Medicine

Case Western Reserve University

Cleveland, Ohio

EDUCATION AND TRAINING

POSTDOCTORAL

1990 to 1991 Chief Resident, Department of Physical Medicine

And Rehabilitation

MetroHealth Medical Center/ Case Western Reserve University

Cleveland, Ohio

1987 to 1990 Intern and Resident

Department of Physical Medicine and Rehabilitation

MetroHealth Medical Center/ Case Western Reserve University

Cleveland, Ohio

GRADUATE

1983 to 1987 Creighton School of Medicine

Omaha, Nebraska

Doctor of Medicine May 1987

CERTIFICATIONS

May 20, 1992 American Board of Physical Medicine and

Rehabilitation Diplomate

Certificate Number 3849

July 1, 1988 National Board of Medical Examiners

Diplomate

Certificate Number 345524

<u>AFFILIATIONS</u>

November 15, 1992 American Academy of Physical Medicine and

To November 15, 2008 Rehabilitation Fellow Member

LICENSURE

Ohio 35-06-1573-K

PUBLICATIONS

Hegstad SJ, Smith AA, Patterson BM, Kelly CM, Meland MB: Functional Lower Limb

Salvage with an Osteocutaneus Filet Flap of the Foot. Ann Plast Surg 1996; 36:413-416.

Frost FS, Kelly CM, McCarthy W: **High Resolution Real-Time Ultrasonography for the Diagnosis of Venous Thrombosis in the**

Rehabilitation Setting. Am J PMR 1991; 70:3-4.

CHAPTERS

Kelly CM: Skin Disorders and their Management, in Prosthetics and Patient

Management: A Comprehensive Clinical Approach.

Kevin Carroll CP Editor, SLACK Inc. 2006

Kelly CM: Mechanisms and Classifications of Spinal Cord Injury, in <u>Litigating Spinal Cord</u>

<u>Injuries: Law, Medicine, and Economics.</u> Mark Kosieradzke Ed., Wiley Law Publications, New York

1995.

Research and Grants

US Department of Veteran's Affairs Rehabilitation, Research & Development, "Self Management to Improve Function following Amputation." (2014 – 2018)
Role: Site Primary Investigator and Co-Investigator
\$1.1M

Advanced Platform Technology Center of Excellence, Innovation Incentive II, "Advanced Materials for Water Managing Prosthetic Socket Liners", (2013-2014)

Role: Co-Investigator \$20K

National Institutes of Health (NIH) Director's Transformative R01 Research Award, 1R01NS081710 - 01, "Restoring upper limb movement sense to amputees; a move towards natural control of prosthetic limbs", (2013-2017)

Role: Co-Investigator \$1.3M

Defense Advanced Research Project Agency (DARPA), Department of Defense, 61732-LS-DRP, Under P-1108-114403/DARPA-BAA-11-08 Reliable Peripheral Interfaces (RPI), "A touch feedback tactor array system for long-term implementation of physiologically relevant cutaneous touch with prosthetic limbs.", (2012-2015)

Role: Co-Investigator \$1.2M

Co-Investigator - "Fully Implanted System for Upper Limb Myoelectric Prosthesis control" Robert Kirsh, PhD. PI

COURSES Instructed

"Anatomy and Biomechanics of the Foot and Ankle" Biomechanics section given at the AAPMR Annual Meeting, Philadelphia, PA October, 2005.

ABSTRACTS

Kelly CM, Grekco KB, Philippbar S: <u>The Pharyngeal Pouch: Diagnosis and Management.</u> APMR 1994; 75(6): 727.

Wu PBJ, Kelly CM, Huang SQ: <u>Sensory Nerve Temporal Dispersion: Normative Data in Upper Extremity Nerve Conduction.</u> APMR 1991; 72: 813.

Huang SQ, WU PBJ, Kelly CM: <u>The Collision Technique to "Purify" the Superficial Radial Sensory Response: A Preliminary Investigation.</u>
APMR 1990; 71: 793.

Vargo MM, Taylor CK, Kelly CM: <u>Lower Cervical Denervation from Upper Segment Cord</u>
Compression. APMR 1990; 71: 813.

Kelly CM, Livingston SL: <u>The Indication for Multiple Prostheses in Below Knee</u>
<u>Amputation.</u> APMR 1989; 70: A-99

Honors and Awards

Cleveland Top Docs – Cleveland Magazine 2008 thru 2014, 2018

Cleveland Super Docs 2012 - 2014

Best Doctors in America 2007 – 2018

CWRU/MRIO Chair Award for

Teaching

2014

Editorials/Commentary

Combining Amputee Services:

A fictional dialogue

O&P Business News March 1, 2003

Media Appearances

WPCN **The Sound of Ideas** 07/22/09 Topic – Diabetes and Amputations.

WPCN **The Sound of Ideas** 08/31/11 Topic – Amputations and Prosthetics.

WPCN <u>The Sound of Ideas</u> 08/12/2014 Topic – Amputation Sensory

feedback.

Lectures

"Pain and Phantom Pain in the Upper Extremity Amputee"

2018 Regional Upper Extremity Prosthetic and

Orthotic Rehabilitation Course

Cleveland, Ohio April 20, 2018

"Skin Conditions in the Amputee" 2017 Regional Lower Extremity Amputee

Rehabilitation Course Cleveland, Ohio April 28, 2017

"Post-Amputation Pain Syndromes 2017 Regional Lower Extremity Amputee

And their Management"

Rehabilitation Course Cleveland, Ohio April 28, 2017

"Pain and Phantom Pain in the Upper Extremity Amputee"

2016 Regional Upper Extremity Prosthetic and

Orthotic Rehabilitation Course

Cleveland, Ohio May 6, 2016

"Care of the Veteran Amputee"

Treating the Healthcare Needs of the Veterans in

the 21st Century.

Cleveland Clinic Foundation

November 9, 2015

"Skin Conditions in the Amputee"

2015 Regional Lower Extremity Amputee

Rehabilitation Course Cleveland, Ohio May 1, 2015

"Post-Amputation Pain Syndromes

And their Management"

2015 Regional Lower Extremity Amputee

Rehabilitation Course Cleveland, Ohio May 1, 2015

"Pain and Phantom Pain in the Upper Extremity Amputee"

2014 Regional Upper Extremity Prosthetic and

Orthotic Rehabilitation Course

Cleveland, Ohio April 25, 2014

"Post-Amputation Pain Syndromes

And their Management"

2013 Regional Lower Extremity Amputee

Rehabilitation Course Cleveland, Ohio May 3, 2013

"Skin Conditions in the Amputee"

2013 Regional Lower Extremity Amputee

Rehabilitation Course Cleveland, Ohio May 3, 2013

"Pain and Phantom Pain in the Upper Extremity Amputee"

2012 Regional Upper Extremity Prosthetic and

Orthotic Rehabilitation Course

Cleveland, Ohio May 5, 2012

"Post-Amputation Pain Syndromes 2011 Regional Lower Extremity Amputee And their Management" Rehabilitation Course Cleveland, Ohio April 8, 2011 "Skin Conditions in the Amputee" 2011 Regional Lower Extremity Amputee Rehabilitation Course Cleveland, Ohio April 8, 2011 "Pain and Phantom Pain in the 2010 Regional Upper Extremity Prosthetic and Upper Extremity Amputee" Orthotic Rehabilitation Course Cleveland, Ohio April 23, 2010 "Phantom Pain in the Amputee" Cleveland VA Med Center Pain Grand Rounds January 21, 2010 "Post-Amputation Pain Syndromes 2009 Regional Lower Extremity Amputee And their Management" Rehabilitation Course Independence, Ohio May 2, 2009 "Skin Conditions in the Amputee" 2009 Regional Lower Extremity Amputee Rehabilitation Course Independence, Ohio May 1, 2009 25th Annual Physical medicine and Rehabilitation "Electronics in Lower Extremity Update – University of Utah Prosthetics: What we have and When to use it." Park City, Utah January 31, 2009 "Care of the Amputee" NEOCMN 2-Day Conference and Exhibit Westlake, Ohio May 23, 2009 "Care of the Amputee" PM&R/SCI/Neurology Grand Rounds

Louis Stokes Cleveland VA Med Center

Ohio Chapter of the American Academy of Orthotics

November 27, 2008

and Prosthetics (AAOP) October 11, 2008

"Skin Conditions of the Amputee"

"Pain in the Amputee"	Amputee Support Group Presentation
• • • • • • • • • • • • • • • • • • •	

MetroHealth Medical Center

August 2007

"Pain in the Amputee" Pain Grand Rounds

Louis Stokes Cleveland VA Med Center

May 2007

"What's New in Upper Extremity

Prosthetics"

Engineering Monthly Rounds MetroHealth Medical Center

November 2006

"What's New in Lower Extremity

Prosthetics"

Engineering Monthly Rounds MetroHealth Medical Center

October 2006

"Skin Conditions of the Amputee" Hanger Prosthetics and Orthotics National Meeting

February 2003 Reno, NV

"Rehabilitation of the Sole Flap" MetroHealth Center for Rehabilitation

Grand Rounds September 23, 2002 Cleveland Ohio

"Rehabilitation of the Sole Flap" Maine Society of Orthopedics

March 2002

"The team Approach to Amputee

Rehabilitation"

Hanger Prosthetics and Orthotics National Meeting

February 2002 Reno, NV

"Rehabilitation of the Sole Flap" Hanger Prosthetics and Orthotics National Meeting

February 2002 Reno, NV

"Rehabilitation of the Sole Flap" Biennial Pacific Rim Prosthetics and Orthotics

Conference February 2002 Kona, Hawaii

"Rehabilitation of the Amputee" North East Ohio Rehabilitation Association

December 1st, 2000 Cleveland Ohio

"The Phantom (Pain) Menace" Biennial Pacific Rim Prosthetics and Orthotics

Conference

February 6th, 2000

Kauai, Hawaii

"The Phantom (Pain) Menace" Second Annual Prosthetics and Orthotics

Conference

January 24th, 2000 Winter Park, Colorado

"The Filet of Sole Reconstruction

to Preserve Below Knee

Amputation level - Rehabilitation

Issues"

15th Annual University of Utah Physical Medicine To

and Rehabilitation Update.

February 3rd, 1999 Park City, Utah

"The Filet of Sole Reconstruction

to Preserve Below Knee

Amputation level - Rehabilitation

Issues"

First Annual Prosthetics and Orthotics Conference

and Rehabilitation Update.

January 26th, 1999 Winter Park, Colorado

"Dysphagia: the State of the Art" Physical Medicine and Rehabilitation Grand Rounds

MetroHealth Medical Center

Cleveland, Ohio

1997

Teaching

PM&R Residency VA Site Director

Cleveland VA Medical Center

October 14, 2007 to present

Resident Continuity Clinic

MetroHealth Medical Center

June 2001 to September 2007

Resident Didactics Amputee section

MetroHealth Medical Center

1994 to 2008

Rehab 5001 Amputee lecture Case Western Reserve University From inception to 2007

Resident Didactics Foot and Ankle

MetroHealth Medical Center

1991 to 2007

Service

Advanced Platform Technology (APT) Center Leadership Committee 09/2010 to present

Cleveland VA Medical Center

Medical Executive Committee Cleveland VA Medical Center

10/2007 to present

Peer Review Committee Cleveland VA Medical Center

10/2007 to present

Blind Rehab Committee (Chair) Cleveland VA Medical Center

06/2009 to present

Executive Committee MetroHealth Department of PM&R

2001 to 2007

MetroHealth Leadership

Institute 2002

April - November 2002

Practice Plan Committee Department of PM&R

1994 to 2001

Outpatient Management

Committee - Chair

Department of PM&R

1997 to 2007

Resident Education Committee Department of PM&R

1993 to 2007

PM&R Vision Advocacy Council MetroHealth Rehabilitation Institute of Ohio

1995 to 2007