## Cancer Cachexia: Molecular Mechanisms and Therapeutic Approaches

Boston, September 21-23, 2012

## Friday, September 21, 2012

1:00 pm Registration and Poster Set-up **Belvidere Foyer** Maverick A&B 4:00-4:10 pm **Introductory Remarks** Adams A&B

Denis Guttridge, PhD

Professor, Molecular Virology, Immunology

and Medical Genetics The Ohio State University

Columbus, Ohio

4:10-5:10 pm (Keynote Address) - Mechanisms of muscle atrophy and

> hypertrophy David Glass, PhD

Global Head, Musculoskeletal Diseases Group Novartis Institutes for Biomedical Research

Boston, MA Q/A -

5:15-6:45 pm **Welcoming Reception Fenway Room** 

**Poster Viewing Maverick A&B** 7:00 pm

Saturday, September 22, 2012

7:30-8:30 am **Continental Breakfast Pre-Assembly** 

Session 1

**Clinical Manifestations of Cancer Cachexia Belvidere** 

(Chair: Aminah Jatoi, MD)

8:30-9:00 am Classification of cancer cachexia

Kenneth Fearon, MD, MBBch. Hons.

Professor of Surgical Oncology

University of Edinburgh

United Kingdom

Q/A -

Body composition and prognostication in cancer 9:00-9:30 am

Vickie Baracos, PhD

Professor and Alberta Cancer Foundation Chair in Palliative

Medicine

Department of Oncology University of Alberta

Edmonton Alberta, Canada

Q/A -

9:30-9:45 am (Short Talk 1) Cancer Cachexia: fitting classifications

into clinical practice Maurizio Muscaritoli, MD

Department of Clinical Medicine

University La Sapienza

Rome, Italy

Q/A

9:45-10:00 am (Short Talk 2) Anti-cachexia melanocortin peptide

with oral activity Kenneth A. Gruber, PhD Tensive Controls, Inc Columbia, Missouri

Q/A -

10:00-10:30 am Coffee Break Pre-Assembly

10:30 – 11:00 am Onset and progression of cancer cachexia, results

from the Montreal longitudinal study

Bruno Gagnon, MD Assistant Professor

Department of Medicine and Oncology Faculty of Medicine, McGill University

Montreal, Quebec, Canada

Q/A -

11:00-11:30 am Interactions between antineoplastic therapy and Belvidere

cachexia: a medical oncology perspective"

Michael Sawyer, MD

Associate Professor, Department of Medical Oncology

University of Alberta Cross Cancer Institute Edmonton, Alberta, Canada

O/A-

11:30-11:45 am (Short Talk 3) Physical functions and sexual dimorphism

Nathan Stephens, MD

Surgical Research Fellow, Tissue Injury & Repair

University of Edinburgh Edinburgh, United Kingdom

Q/A

11:45-12:00 pm (Short Talk 4) Progressive skeletal muscle

wasting and long-term impairment of mitochondrial function following repeated cyclical administration of deverables and devembles and

of doxorubicin and dexamethasone

Thomas Jagoe, MD, PhD Assistant Professor Department of Oncology

McGill University

Montreal, Quebec, Canada

**Belvidere** 

12:00 noon Lunch Fenway Room

Session 2

**Mechanisms of Muscle** 

Wasting in Cancer Cachexia (Part 1) Belvidere

(Chair: Denis Guttridge, PhD)

1:30-2:00 pm New insights into the molecular mechanisms of

muscle wasting and cachexia

Alfred Goldberg, MD

Professor

Department of Cell Biology Harvard Medical School

Boston, MA

Q/A -

2:00-2:30 pm Mechanisms of muscle wasting in cancer

Josep Argiles, PhD

Professor

University of Barcelona Barcelona, Spain

Q/A-

2:30-3:00 pm A novel pathway in TGFbeta signaling that controls muscle

cachexia

Marco Sandri, MD Assistant Professor

Department of Biomedical Science

University of Padova

Padova, Italy

Q/A-

3:00-5:00 pm Poster Session (Judging) + Free Time Maverick A&B Adams A&B

Session 3:

Mechanisms of Muscle Wasting in Cancer Cachexia, Belvidere

Part II

(Chair: Marion Couch, MD, PhD)

5:00-5:30 pm **Cellular signaling in cancer cachexia** 

Denis Guttridge, PhD

Professor

Department of Molecular Virology, Immunology and

**Medical Genetics** 

The Ohio State University

Columbus, Ohio

Q/A -

5:30-6:00 pm The role of triglyceride lipases in cancer cachexia

Belvidere

Gerald Hoelfer, MD Professor of Pathology Institute of Pathology Medical University of Graz

Graz, Austria

Q/A-

6:00-6:15 pm (Short Talk 1) – Stat3 in cancer cachexia

Teresa Zimmers, PhD Associate Professor

Department of Cell Biology Thomas Jefferson University Philadelphia, Pennsylvania

Q/A -

6:15-6:30 pm (Short Talk 2) - PGC-1 $\alpha$  isoform (PGC-1 $\alpha$  4) regulates

skeletal muscle wasting during cancer-induced cachexia

James White, PhD Research Fellow

Dana Farber Cancer Center Harvard Medical School

Cambridge, MA

Q/A -

6:30-6:45 pm (Short Talk 3) - The translation inhibitor pateamine A

Prevents cachexia-induced muscle wasting in mice

Eddine Gallouzi, PhD Associate Professor

Department of Biochemistry

Goodman Cancer Center, McGill University

Montreal, Quebec, Canada

Q/A -

7:00 pm **Banquet** 

Banquet Fenway Room

9:00 pm Evening Reception/Poster Viewing Maverick A&B

Adams A&B

Sunday, September 23, 2012

7:30-8:30 am Breakfast Fenway Room

**Session 4:** 

Involvement of Non-Muscle Tissue in Cancer Cachexia Belvidere

(Chair: Ken Fearon, MD)

**Belvidere** 8:30-9:00 am Cardiac muscle wasting and fibrosis in cancer Jochen Springer, PhD Center for Cardiovascular Research Charite Campus Mitte Berlin, Germany Q/A -9:00-9:30 am **Chemotherapy-induced cardiotoxicity** Thomas Force, MD Professor Clinical Director Jefferson Center for Translational Medicine Thomas Jefferson University Philadelphia, Pennsylvania Q/A-9:30-9:45 am Short Talk 1 - Cause of death in cancer cachexia the impact of CV drugs Andrew J. Stewart Coats, PhD Professor and CEO, Norwich Research Park Norwich, UK Q/A

9:45-10:00 am

(Short Talk 2) – Ryanodine receptor 1 remodeling in cancer associated muscle dysfunction
David Waning, PhD
Assistant Research Professor
Indiana University School of Medicine

Indianapolis, Indiana

Q/A

10:00-10:30 am Coffee Break Pre-Assembly

10:30-11:00 am Mechanisms of cardiac atrophy in cancer

Monte Willis, MD Associate Professor McAllister Heart Institute

Department of Pathology and Laboratory Medicine

University of North Carolina Chapel Hill, North Carolina

Q/A

11:00-11:30 am Neuroendocrine influences in cachexia

Daniel Marks, MD Associate Professor

Doernbecher Children's Hospital

Oregon Health and Sciences University

Portland, Oregon

Q/A -

Belvidere

11:30-11:45 am (Short Talk 3) – NF-κB signaling proteins and transcription

factors required for cancer-induced muscle wasting

Susan Kandarian, PhD

Professor, Department of Health Sciences

Boston University Boston, MA

Q/A

12:00-1:30 pm **Lunch** 

Fenway Room

**Belvidere** 

Belvidere

Session 5:

Therapeutic Targets and Clinical Trials in Cancer Cachexia

(Chair: Vickie Baracos, PhD)

1:30-2:00 pm Targeting myostatin as a potential therapy for cancer

cachexia

Ronenn Roubenoff, MD Novartis/Tufts University

Boston, MA Q/A -

2:00-2:15 pm (Short Talk 1)Targeting ghrelin system for the management of

cachexia/anorexia syndrome

Egidio Del Fabbro, MD Associate Professor

Department of Internal Medicine Virginia Commonwealth University

Richmond, Virginia

Q/A -

2:15-2:45 pm Choosing the right clinical endpoints

for a cachexia trial

Florian Strasser, MD, ABHPM

Associate Professor

Oncological Palliative Medicine

Cantonal Hospital St. Gallen, Switzerland

Q/A -

2:45-3:00 pm (Short Talk 2) – Cancer cachexia: Evaluation of body

composition using CT scans and identification of genetic

markers

Neil Johns, MBBS, BSC, MRCS Specialty Registrar in General Surgery Clinical Surgery School of Clinical Sciences

University of Edinburgh

Edinburgh, UK

3:00-3:30 pm Coffee Break Pre-Assembly

3:30-4:00 pm Treatment development for cancer cachexia: Belvidere

current status, statistical issues & avoidable errors

Stefan Anker, MD, PhD

Professor of Cardiology and Cachexia Research

Department of Cardiology

Charite Campus Virchow-Klinikum

Berlin, Germany

Q/A -

4:00-4:30 pm The challenges of recruiting and retaining

patients onto cancer cachexia trials

Aminah Jatoi, MD

Professor

Department of Oncology

Mayo Clinic

Rochester, Minnesota

Q/A -

4:30-4:45 p.m. (Short Talk 3) – Molecular mechanisms underlying reduced

knee extensor function and walking endurance in cancer Patients: diminished myosin-actin cross-bridge kinetics

Michael Toth, PhD Department of Medicine

University of Vermont College of Medicine

Burlington, Vermont

Q/A -

4:45-5:30 pm Panel Discussion (led by)

Marion Couch, MD, PhD Professor and Director

Head and Neck Research, Department of Otolaryngology

University of Vermont Burlington, Vermont

5:30-5:40 pm Closing Remarks (Denis Guttridge)