MISSION STATEMENT

The University of Maryland School of Medicine Mesothelioma Treatment and Research Center is dedicated to being the world's foremost center for the treatment and study of mesothelioma.

The Center brings to bear all of the extraordinary medical and scientific resources available at the University of Maryland, as well as collaborating with likeminded researchers across the globe, and is dedicated to providing the best treatments available today and developing the best treatments available tomorrow.

The University Of Maryland School Of Medicine
Mesothelioma Treatment & Research Center
MEET THE MESOTHELIOMA TEAM

**Thoracic Surgery**

- Shamus Carr, MD
  Assistant Professor of Surgery
- Shelby Stewart, MD
  Assistant Professor of Surgery
- Joseph Friedberg, MD
  Professor of Surgery
- Melissa Culligan, RN, MS
  Clinical Instructor in Surgery
- Colleen Norton, RN, BSN
  Mesothelioma Nurse Navigator

**Medical Oncology / Pathology**

- Kenneth Miller, MD
  Assistant Professor of Medicine
- Christian Rofo, MD
  Professor of Medicine
- Katherine Scilla, MD
  Assistant Professor of Medicine
- Petr Hausner, MD
  Assistant Professor of Medicine
- Allen Burke, MD
  Associate Professor of Pathology
- Jonathan Heath, MD
  Assistant Professor of Pathology

**Radiation Oncology / Radiology**

- Charles Simone, II, MD
  Associate Professor of Radiation Oncology
- Pranshu Mohindra, MD
  Assistant Professor of Radiation Oncology
- Erica Glass, CRNP
  Nurse Practitioner, Radiation Oncology
- Jean Jeudy, MD
  Associate Professor of Radiology
- Charles White, MD
  Professor of Radiology

**Collaborative Mesothelioma Team**

- Richard Eckert, MD
  Discovery-Translational Research
- Edward Pickering, MD
  Interventional Pulmonology
- Ashutosh Sachdeva, MD
  Interventional Pulmonology
- Melissa McDiarmid, MD
  Occupational Medicine
- Tamara Khashab, MD
  Clinical Research
The sole focus of The Center is what is best for the patient, with the providers being defined by dedication, compassion, teamwork and the \textit{esprit de corps} that comes from being part of a program that offers hope for one of the most challenging problems in medicine. The clinical arm of The Center focuses on providing the patient with all appropriate state of the art treatment options, including clinical trials. The process starts with any form of contact to The Center by the patient, a family member or a referring physician. Within hours the patient can expect a call from The Center’s Mesothelioma Nurse Navigator. The Navigator interviews the patient, gathers all necessary records and puts together a presentation for The Center’s weekly multidisciplinary conference where all potential treatment options are considered and discussed. The patients and their families are then seen immediately after the conference, staying in the same exam room with all relevant specialists rotating through to consult with them. The consultations only conclude when all questions are answered and the patient has the necessary information to decide how they would like to proceed. As the majority of patients come from afar, every effort is made to integrate the patient’s local physicians into the treatment team. The weekly conference is attended by specialists in: thoracic surgery, oncology nursing, integrative medicine, pathology, chest radiology, pulmonary medicine, medical oncology and radiation oncology. Also affiliated with The Center are: discovery scientists, translational researchers, immunologists, clinical researchers, occupational medicine specialists, epidemiologists, nutritionists, physical therapists, respiratory therapists, palliative care specialists, social workers, clergy and psychiatrists. The breadth and depth of integrated expertise embodied within the University of Maryland School of Medicine Mesothelioma Treatment and Research Center is unique and unsurpassed.
Mesothelioma Treatment & Research Center

Progress Report

Radiation Oncology Team
FROM LEFT:
Stephanie Rice, MD; Charles Simone, MD;
Erica Glass, CRNP

Medical Oncology Team
FROM LEFT:
Petr Hausner, MD; Katherine Scilla, MD; Kenneth Miller, MD;
Christian Rolfo, MD

Pathology and Radiology Team Members
FROM LEFT:
Jonathan Heath, MD and Jean Jeudy, MD

Interventional Pulmonary Medicine Team
FROM LEFT:
Blaine Kenaa, MD; Peter Olivieri, MD;
Edward Pickering, MD; Ashutosh Sachdeva, MD;
Matthew Paparo, MD

Mesothelioma Patient Conference
FROM LEFT:
Colleen Norton, BSN; Charles Simone, MD;
Kenneth Miller, MD; Edward Pickering, MD
Although The Center has not even been in existence for three years, the foundation for a robust research program has already been established. All initial efforts were placed into building the clinical program, which is now internationally recognized, and the research program is now poised to explode. The research program has been designed to blend seamlessly with the clinical program, one of very few such double-armed mesothelioma programs in the world. Especially for a rare cancer like mesothelioma, this is a formula where “the whole is greater than the sum of the parts,” with both the research and clinical efforts benefiting from association with the other. The research that is in development spans the entire spectrum of needs for mesothelioma patients, ranging from: discovery science through clinical trials, prevention through palliation and investigator initiated in-house trials through international multi-institution collaborative trials. A full list of the current research projects can be found in Appendix 1, but briefly, the projects are as follows:

- **Discovery Science** – This effort focuses on the basic science of mesothelioma and contributes to the general understanding of this cancer and identification of treatment opportunities at the cellular level.

- **Translational Research** – This effort is geared toward developing treatments for mesothelioma patients anticipated to go from “bench to bedside” within three to seven years. Some of these projects will be developed as offshoots of promising findings from the discovery science effort.

- **Screening and Early Detection** – The Center has teamed up with the internationally acclaimed Occupational Medicine Department at the University of Maryland. Together we are in the process of developing both the first mesothelioma registry, which is poised to become the first national registry for this cancer, and a very sophisticated screening questionnaire. The latter, in combination with liquid biopsy technology we are exploring, has potential to emerge as the first screening program for mesothelioma.
**Prevention** – One of the ongoing discovery science projects has provided compelling evidence that a certain natural dietary supplement might be effective in short circuiting the pathway that leads from asbestos exposure to mesothelioma. This is a potentially revolutionary discovery that would provide the first course of action available for patients at risk for developing mesothelioma and who will be readily identified through our new Mesothelioma Screening and Early Detection Program. There is preliminary data to suggest that this natural supplement may not just serve as a prophylaxis against developing mesothelioma, but may also emerge as an effective treatment for established mesothelioma.

**Clinical Trials for All Presentations of Mesothelioma** – This is the core strength of The Center and the portfolio of clinical trials for this cancer has been in development since The Center’s inception. We are about to start rolling out these trials, which historically leads to a significant influx of patients for this particular cancer. The trials will include, either alone or in combination, the modalities of: surgery, proton therapy, chemotherapy, immunotherapy, dendritic cell therapy, tumor vaccine therapy, gene therapy, electromagnetic field therapy and photodynamic therapy. It is anticipated that, within five years, no other program will have an equally comprehensive offering of clinical trials.

**Integrative Medicine** – Recognizing that a diagnosis of mesothelioma affects more than just the lining of the chest cavity, The Center is committed to embracing an integrated holistic approach for our patients. Trials to evaluate and optimize the modalities of mindfulness, acupuncture, diet, massage and Reiki are under development.
2018 UPDATE

The Center was established less than three years ago and has consulted upon patients from across the country and internationally (Appendix 2). Members of the Center have published their research in peer-reviewed journals (Appendix 3), are invited speakers and presenters at national and international mesothelioma meetings (Appendix 4) and serve on national and international mesothelioma and thoracic oncology committees (Appendix 5). As part of the Center’s marketing plan, Drs. Friedberg and Simone participated in a Facebook Live event that was well received by the mesothelioma community (Appendix 6).
<table>
<thead>
<tr>
<th>Research Project</th>
<th>Collaborative Team</th>
<th>Status</th>
<th>Funding Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photobrachytherapy *Friedberg Holds Patent</td>
<td>Thoracic Surgery, UPENN</td>
<td>Conceptual work complete; research team assembled</td>
<td>RO-1 (2020)</td>
</tr>
<tr>
<td>FN-I4 targeted therapies for mesothelioma</td>
<td>Thoracic Surgery, Neurosurgery (UM)</td>
<td>Conceptual work complete; research team assembled</td>
<td>RO-1 (2018/19)</td>
</tr>
<tr>
<td>Inhaled lung sealant *Friedberg Holds Patent</td>
<td>Thoracic Surgery, Hopkins</td>
<td>Conceptual work complete; research team assembled</td>
<td>SBIR (2019)</td>
</tr>
<tr>
<td>Mesothelioma Patient Registry / Screening Pilot</td>
<td>Thoracic Surgery, Medical &amp; Radiation Oncology, Occupational Medicine</td>
<td>Protocol written and start date for pilot study is September 2018</td>
<td>CDC Funding Meso Registry Bill $500,000.00 (2020)</td>
</tr>
<tr>
<td>WINNERS Trial</td>
<td>Improving care of thoracic surgery patients</td>
<td>Protocol in development</td>
<td>PCORI Grant (2019)</td>
</tr>
<tr>
<td>Phase I/II Trial of Whole Pleural Intensity-Modulated Proton Therapy (IMPT) &amp; Concurrent Chemotherapy for Patients with MPM</td>
<td>Medical Oncology, Radiation Oncology Multicenter</td>
<td>Protocol in development</td>
<td>Industry Sponsorship</td>
</tr>
<tr>
<td>Dual Agent Immunotherapy with a CXCR2 Inhibitor in Patients with Mesothelioma and Sarcoma</td>
<td>Medical Oncology, Radiation Oncology</td>
<td>Protocol in development</td>
<td>Industry Sponsorship</td>
</tr>
<tr>
<td>Combining Immunotherapy with Nivolumab &amp; IDO inhibitors in Patients with Mesothelioma</td>
<td>Medical Oncology, Radiation Oncology</td>
<td>Proposal submitted to Merck</td>
<td>Industry Sponsorship</td>
</tr>
<tr>
<td>Phase III Study to Evaluate the Efficacy &amp; Safety of Intrapleural Administration of Adenovirus-Delivered Interferon Alpha-2b (rAd-IFN) in Combination with Celecoxib &amp; Gemcitabine in Patients with MPM</td>
<td>UPENN, New York University</td>
<td>TRIZELL contract in review</td>
<td>Industry Sponsorship</td>
</tr>
<tr>
<td>National Mesothelioma Virtual Bank (NMVB)</td>
<td>Thoracic Surgery; Pathology (Burke); Eckert</td>
<td>NIH Funded – Subcontract <strong>$100,000/year for 5 years</strong></td>
<td><strong>ACTIVE</strong></td>
</tr>
<tr>
<td>Prospective Molecular Analysis Study</td>
<td>Thoracic Surgery, Pathology, Harvard</td>
<td>ROI Subcontract <strong>$50,000/year for 5 years</strong></td>
<td><strong>ACTIVE</strong></td>
</tr>
<tr>
<td>Randomized Phase II Trial of Radical Pleurectomy and Post-operative Chemotherapy with or without Photodynamic Therapy for Patients with MPM</td>
<td>UPENN, French Mesothelioma Consortium</td>
<td>Ongoing NIH PO1</td>
<td><strong>ACTIVE</strong></td>
</tr>
</tbody>
</table>
Peer-Reviewed Manuscripts:


Presentations/Abstracts:

1. Li YR, Alley EW. Friedberg JS, Culligan M, Busch TM, Hahn SM, Cengel KA, Simone CB II. Prospective Assessment of Proton Therapy for Malignant Pleural Mesothelioma. Accepted, International Association for the Study of Lung Cancer 16th World Conference on Lung Cancer, 2015. [Oral]

2. Cengel KA, Hagan S, Moon E, Simone CB II. Examining the role of growth factor/inflammatory signaling pathway crosstalk in mesothelioma sensitivity to photodynamic therapy and radiation therapy using 2D and novel 3D tissue culture models. Accepted, 13th International Conference of the International Mesothelioma Interest Group (iMig 2016), 2016. [Oral]


Book Chapters:


APPENDIX 4
NATIONAL / INTERNATIONAL INVITED PRESENTATIONS

Joseph S. Friedberg, MD (Thoracic Surgery)

2015

• Surgery as a local therapy for Mesothelioma. International Scientific Symposium on Malignant Mesothelioma, National Cancer Institute, Bethesda, Maryland

• Surgery for Malignant Pleural Mesothelioma. Pulmonary and Critical Care Grand Rounds, University of Maryland Medical Center, Baltimore, Maryland

• Surgery for Malignant Pleural Mesothelioma. Anesthesia Grand Rounds, University of Maryland Medical Center, Baltimore, Maryland

• Surgery for Malignant Pleural Mesothelioma – Mozart or Metallica? Surgery Grand Rounds, University of Maryland Medical Center, Baltimore, Maryland

• Grand Rounds: Difficult Mesothelioma Cases 16th IASLC World Conference on Lung Cancer, Denver, CO

• Surgical Management of Malignant Pleural Mesothelioma. UPDATE: Thoracic Oncology 2015 – University of Maryland School of Medicine CME/CE Program, Baltimore, Maryland, September 2015

2016

• Tips and Pitfalls of Extended Pleurectomy-Decortication for Mesothelioma. Japanese Association for Thoracic Surgery, Annual Meeting. Okayama, Japan

• Surgical Management of Malignant Pleural Mesothelioma. Johns Hopkins University School of Medicine 6th Annual Evaluation and Management of Pleural Disease, Baltimore, Maryland

• Surgery for Malignant Pleural Mesothelioma. Diagnostic Radiology and Nuclear Medicine Grand Rounds, University of Maryland Medical Center, Baltimore, Maryland

• Surgery for Malignant Pleural Mesothelioma. Grand Rounds, Shady Grove Medical Center, Rockville, Maryland

• Surgery for Malignant Pleural Mesothelioma. Grand Rounds, Prince Georges’ Hospital Center, Lanham, Maryland

• Surgery for Malignant Pleural Mesothelioma. Grand Rounds, Holy Cross Hospital, Silver Spring, Maryland

• Presenting Author – “A Novel System for Identifying Pulmonary Air Leaks with an Inhaled Marker” 96th AATS Annual Meeting, Baltimore, Maryland

• Surgical Management of Malignant Pleural Mesothelioma. UPDATE: Thoracic Oncology 2016 – University of Maryland School of Medicine CME/CE Program, Baltimore, Maryland, November 11, 2016

2017

• Lung-Sparing Surgery for Malignant Pleural Mesothelioma. Japanese Association for Thoracic Surgery, Annual Meeting. Tokyo, Japan

• Surgical Management of Malignant Pleural Mesothelioma. Johns Hopkins University School of Medicine 7th Annual Evaluation and Management of Pleural Disease, Baltimore, Maryland

• Surgical Management of Malignant Pleural Mesothelioma. UPDATE: Thoracic Oncology 2017 – University of Maryland School of Medicine CME/CE Program, Baltimore, Maryland, November 17, 2017

2018

• Surgery for Malignant Pleural Mesothelioma. 41st Annual Meeting of the Japan Society for Respiratory Endoscopy, Osaka, Japan

• Surgical Management of Malignant Pleural Mesothelioma. Johns Hopkins University School of Medicine 8th Annual Evaluation and Management of Pleural Disease, Baltimore, Maryland

• Surgical Management of Malignant Pleural Mesothelioma. American Thoracic Society Annual Meeting, San Diego, CA

• Lung-Sparing Surgery for Malignant Pleural Mesothelioma. Cleveland Clinic Visiting Professor, Cleveland, Ohio

• Lung-Sparing Surgery for Malignant Pleural Mesothelioma. American Society of Clinical Oncology Annual Meeting, Chicago, IL

• Session Chair – Surgical Palliation for Malignant Pleural Mesothelioma. International Mesothelioma Interest Group – 14th International Conference, Ottawa, Canada, May 2018

International Lung-Sparing Surgery for Malignant Pleural Mesothelioma Surgical Mentorship Program – Joseph Friedberg, MD

• 2016: Lung-Sparing Surgery for Malignant Pleural Mesothelioma Demonstration at the University of Maryland Medical Center, Japanese Thoracic Surgery Fellow and Attending Thoracic Surgeon

• 2017: Lung-Sparing Surgery for Malignant Pleural Mesothelioma Demonstration – Lille, France

• 2018: Lung-Sparing Surgery for Malignant Pleural Mesothelioma Visiting Thoracic Surgery Fellowship at the University of Maryland Medical Center – Japanese Thoracic Surgeon
Richard Eckert, MD (Basic and Translational Science)

2017
- A Novel Mesothelioma Cancer Stem Cell Survival Factor and Therapy Target. International Symposium on Malignant Mesothelioma (March 2017)
- Cancer Stem Cell Therapy in Mesothelioma. Research in Progress Seminar with T32 Grant Trainees, Platform Presentation, University of Maryland School of Medicine (October 16, 2017)
- A Mesothelioma Cancer Stem Cell Survival Factor and Therapy Target, Mesothelioma Cancer Center Retreat, University of Maryland School of Medicine, Platform Presentation (October 5, 2017)

2018
- Verteporfin and Sulforaphane Suppress Mesothelioma Cancer Stem Cell Survival, 7th Annual Biochemistry and Molecular Biology Retreat, University of Maryland School of Medicine, Poster Presentation (January 19, 2018)
- Successful Collaboration between Surgeons and Basic Scientist – Mesothelioma as an example. Platform Presentation, Department of Surgery Retreat, University of Maryland School of Medicine (January 2018)
- Transglutaminase is a mesothelioma cancer stem cell survival protein, International Society of Precision Cancer Medicine (ISPCM), Buson, Korea (March 17, 2018)

Charles Simone, II, MD (Radiation Oncology)

2015
- Mesothelioma Applied Research Foundation 12th International Symposium on Malignant Mesothelioma: Protons for Mesothelioma?
- Mesothelioma Applied Research Foundation Meet the Mesothelioma Experts: Focus on Mesothelioma Centers of Excellence
- Mesothelioma Applied Research Foundation Mesothelioma Scientific Workshop: Future of Clinical Trials
- New York Regional Conference on Malignant Mesothelioma: Radiation Oncology

2016
- SPIE Photonics West 2016: First Prospective Study Assessing the Combination of Photodynamic Therapy and Proton Radiation Therapy: Safety, Outcomes, and Potential Synergy When Treating Malignant Pleural Mesothelioma

2017
- 37th Meeting of the American Society for Photobiology: Advances in Photodynamic Therapy for Thoracic Malignancies: Frontiers for Mesothelioma and Lung Cancer
- Mesothelioma Applied Research Foundation International Symposium on Malignant Mesothelioma: Patient Selection for and Delivery of the Newest in Precision Radiation Oncology: Pencil Beam Scanning Proton Therapy

• NCI-IASLC-MARF Mesothelioma Clinical Trials Planning Meeting: Early Stage Mesothelioma
• National Capital Consortium, National Cancer Institute, Radiation Oncology Branch Grand Rounds: Malignant Pleural Mesothelioma: A Multimodality Approach to Treatment

Melissa Culligan, RN, BSN, MS (Thoracic Surgery Nursing)

2015

2016

2017
- Evidence Based Care: Interpreting the Research and Enhancing Practice in the Pre-operative Support of Lung Cancer and Mesothelioma Patients. 18th IASLC World Conference on Lung Cancer, Yokohama, Japan – October 2017.

2018
- IASLC Thoracic Oncology School of Nursing: The Role of Thoracic Surgery Nursing in the Care of Mesothelioma and Lung Cancer Patients – A Global Perspective. IASLC-Africa Conference on Lung Cancer, Tangier, Morocco – April 2018
- Patterns of Practice, A Global Perspective – Surgery and Systemic Pleural Mesothelioma Case Presentations. International Mesothelioma Interest Group – 14th International Conference, Ottawa, Canada, May 2018
- Translating Clinical Knowledge into Clinical Action – Surgical Treatment Modalities for Pleural Mesothelioma & Case Presentations. International Mesothelioma Interest Group – 14th International Conference, Ottawa, Canada, May 2018
APPENDIX 5
NATIONAL & INTERNATIONAL COMMITTEES

Joseph S. Friedberg, MD

2018-present  Board of Directors, International Mesothelioma Interest Group (iMig)
2016-present  NIH/IASLC Mesothelioma Clinical Research Task Force
2014-present  International Mesothelioma Interest Group (iMig) Biennial Meeting Scientific Abstract Review Committee
2009-present  Thoracic Surgery Section Editor, UpToDate (www.uptodate.com)
2011-present  Editorial Board, Science World Journal
2011-present  Editorial Board, Lung Cancer Management Journal
1997-present  Reviewer, Annals of Thoracic Surgery
2003-present  Reviewer, Journals of Thoracic and Cardiovascular Surgery
2006-present  Reviewer, Journal of Surgical Research
1999-present  Reviewer, Chest

Charles Simone, II, MD

2016-present  National Cancer Institute Thoracic Malignancies Steering Committee Mesothelioma Working Group
2017-present  International Representative for Radiation Oncology, International Mesothelioma Interest Group (iMig)
2014-present  International Mesothelioma Interest Group (iMig) Biennial Meeting Scientific Abstract Review Committee
2015  Department of Deference Grant Reviewer Section: Peer Reviewed Cancer Research Program (PRCRP) of the Department of Defense Congressionally Directed Medical Research Programs (CDMRP) – Horizon-Mesothelioma (H-MESO) Award

Melissa Culligan, RN, BSN, MS

2015-present  Chair – International Thoracic Oncology Nurse Forum
2012-present  Member, International Association of the Study of Lung Cancer Nursing and Allied Health Committee
2014-2017  Mesothelioma Applied Research Foundation – Board of Directors
2016-present  Editorial Board – International Journal of Clinical Research and Trials
2017  Chair, UK-US International Mesothelioma Nursing Symposium, University of Maryland School of Nursing, March 24, 2017.
2017-2018  International Mesothelioma Interest Group 14th International Conference Scientific Subcommittee
2018-present  Member, International Association of the Study of Lung Cancer Continuing Medical Education Committee

MESOTHELIOMA TREATMENT & RESEARCH CENTER 13
Facebook Live Campaign FY2018

Campaign Time Frame: 9/11/2017 to 9/30/2017
Event Date: 9/14/2017 at 2:00 PM EST
Campaign Report: Prepared on 10/16/2017

Objective and Strategy

The campaign objective was to raise consumer awareness of the comprehensive service for mesothelioma offered at the University of Maryland Greenebaum Comprehensive Cancer Center, with the long-term goal of increasing mesothelioma surgery and radiation oncology volumes.

The campaign employed two digital tactics, targeting men and women 45+ who had careers in the industries of construction, shipbuilding, auto mechanics, heavy industry, military and the like or who liked mesothelioma awareness pages on Facebook within the 48 contiguous states and the greater multi-state UMMC service area: 1) a Facebook Event Page and 2) a Facebook Promoted Posting.

These tactics promoted Dr. Joseph Friedberg and Dr. Charles Simone and their expertise in treating mesothelioma to drive users to participate during the live stream. The pre-promotion post included the call to action to leave a comment or question for answer during the live stream.

Campaign outcomes were tracked by tactic through 1) traffic to the pre-event post, 2) engagement during the live stream event, and 3) engagement with post-event post.
Campaign Highlights

1. The pre-event post ($931.91 spent between 9/11 -9/14) reached 33,317 people before the event, with 2,008 post reactions (Like, Love, Haha, Wow, Sad, Angry), 129 post shares, 24 comments and 10 link clicks. In addition, 27 people liked UMMC’s Facebook page because of the ad.

2. The post-event post ($3,190.27 spent between 9/19-9/30) drove a total of 428,052 impressions. This is the number of times someone saw the post on their news feed. The reach of the post-event post was 260,191 unique individuals.

3. There was a total of 206,926 video views, with 153,536 people taking action (engaging with UMMC in some way), 150 post reactions, and 43 shares. The number of people who watched at least 25% (~10.5 minutes) of the video was 625, and 140 watched the video to the end.

4. The same percentage of men and women watched the entire video, unusual because women are typically more engaged in their family’s health matters. The video proved slightly more popular with men younger than 65 and women older than 65.

5. The video was a total of 41:39 in length. This resulted in a broad discussion and provided the opportunity for viewers to engage at multiple points in the live stream.

6. There were no questions on the post during and after the live stream, but while the video was promoted, there were a number of comments and two questions, as indicated in the images below.
Summary and Recommendation:

While only about 12 people were tuned in at any one time and no questions were asked during the live event, this promotion gave UMMC an opportunity to let the region and a large swath of the United States know that UMGCCC has a comprehensive mesothelioma diagnosis and treatment service. The Mesothelioma page on the umgccc.org website received increased traffic on 9/14 and the days following, and Colleen Norton, Mesothelioma Nurse Navigator, anecdotally noticed an increase in new mesothelioma patients during the second half of September.

Conversion data will be tracked over the next three months to determine overall campaign effectiveness. We can reasonably conclude that the responsiveness and traffic generated by the campaign contributed to an increase in brand awareness and may continue to impact patient volumes in the coming months.
ACKNOWLEDGEMENTS

The University of Maryland School of Medicine Mesothelioma Treatment and Research Center gratefully acknowledges the support of the individuals and institutions that makes our world-class care and research possible:

Mr. Peter G. Angelos
NIH grants: RO1CA120528-11A1 and U24OH009077-10
The University of Maryland Marlene and Stewart Greenebaum Cancer Center