

## Naim Ozturk, Ph.D.

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### ACADEMIC APPOINTMENTS

1993 *Instructor*, Dept. of Physics and Astronomy, University of Toledo, OH  
1994-1997 *Lecturer*, Dept. of Meteorology, Istanbul Technical Univ., Istanbul, Turkey  
1997-2001 *Consulting Physicist*, Istanbul, Turkey  
2003-2004 *Assistant Clinical Professor*, Department of Radiation Oncology, Brody School of Medicine, East Carolina University, Greenville, NC  
2004-2008 *Medical Physicist*, Department of Radiation Oncology, Louis Busch Hager Cancer Center, Mary Imogene Bassett Hospital, Cooperstown, NY  
2008-2010 *Instructor*, Department of Radiation & Cellular Oncology, Univ. of Chicago  
2011- *Assistant Professor*, Department of Radiation & Cellular Oncology, University of Chicago

#### Secondary appointments at the University of Chicago

2009- Faculty, Department of Radiation Oncology, University of Illinois Hospital and Health Sciences System  
2008-2009 Chief of Clinical Physics at two affiliated suburban hospitals

#### Ph.D.-Granting Committee, Program, Institute, and Center Appointments

2009- Committee on Medical Physics, University of Chicago  
2013- Chair, Curriculum Committee, Graduate Program in Medical Physics

### ACADEMIC TRAINING

1979-1984 B.S., Physics, Bogazici University, Istanbul, Turkey  
1985-1989 M.S., Physics, University of Toledo, Toledo, OH  
1989-1993 Ph.D., Physics, University of Toledo, Toledo, OH  
2001-2003 MS, Medical Physics, East Carolina University, Greenville, NC  
2011-2012 Ethics Fellowship, MacLean Center for Clinical Medical Ethics, University of Chicago

### BOARD CERTIFICATION AND LICENSURE

2007- American Board of Radiology certification in Therapeutic Medical Physics  
2008- Registered Therapeutic Radiation Physicist, State of Illinois (regis. #: 1244)  
2004- New York State License in Therapeutic Radiological Medical Physics (inactive; license #: 000277)

## SCHOLARSHIP

### (a) Peer-reviewed publications in the primary literature, exclusive of abstracts:

- N. Ozturk, S G. Armato III , M. L. Giger , C. F. Serago , L. F. Ross, "Ethics and professionalism in medical physics: A survey of AAPM members," *Med. Phys.* 40, 047001 (2013).
- R. T. Deck and N. Ozturk, "Can an Observable with Discrete Eigenvalues Be Conjugate to a Continuum Observable," *Foundations of Physics Letters* 7, 419 (1994).
- N. Ozturk and W. Williamson, Jr., "Monte Carlo Simulation of keV-Electron Transport in Solid Media," *Journal of Applied Physics* 74, 4723 (1993).
- N. Ozturk, A. J. Antolak and W. Williamson, Jr., "Elastic Scattering of Electrons and Positrons by Bound Phosphorus, Indium and Antimony Atoms," *Journal of Applied Physics* 71, 11 (1992).
- N. Ozturk, W. Williamson, Jr. and A. J. Antolak, "Elastic Scattering of Electrons and Positrons by Bound Gallium and Arsenic Atoms," *Journal of Applied Physics* 70, 537 (1991).
- R. J. Meredith, W. Williamson, Jr., V. J. Montemayor, N. Ozturk and A. J. Antolak, "Low Energy Elastic Scattering of Electrons by Bound Silicon and Germanium Atoms," *Journal of Applied Physics* 68, 4937 (1990).
- N. Ozturk, A. J. Antolak and W. Williamson, Jr. "Low Energy Limit Corrections to the Electronic Stopping Power Equation for Ions," *Radiation Effects and Defects in Solids* 114, 133 (1990).
- N. Ozturk, W. Williamson, Jr. and A. J. Antolak, "Electronic Stopping Powers of Ions in Solids," *Physics Letters A* 139, 507 (1989).

### (b) Peer-reviewed abstracts and presentations

- N. Ozturk, B. Smith, K. Ahn and B. Aydogan, "Streamlining and Automating Dosimetric Analysis for Treatment Planning System and Linac QA," presented at the 55<sup>th</sup> AAPM Annual Meeting, Indianapolis, IN, August 4-8, 2013; published in *Med. Phys.* **40**, 205 (2013).
- K. Ahn, N. Ozturk, B. Smith, and B. Aydogan, "Preplanning of Stereotactic Radiosurgery Using the Brainlab IPlan Treatment Planning System," presented at the 55<sup>th</sup> AAPM Annual Meeting, Indianapolis, IN, August 4-8, 2013; published in *Med. Phys.* 40, 314 (2013).
- N. Ozturk, S. Armato, M. Giger, C. Serago & L. F. Ross, "Ethics and professionalism education in medical physics: a needs assessment study," presented at the AAPM Annual Meeting, Charlotte, NC, July 29-August 3, 2012; published in *Med. Phys.* 39, 3623 (2012).
- R. Fahrig, G. Frey, P. Halvorsen, W. Hendee, N. Ozturk, J. Prisciandaro, C. Serago, and G. Starkschall, "Medical Physics Ethics in Action," Interactive Professional Session, 54<sup>th</sup> Annual Meeting of AAPM, Charlotte, NC, July 27-August 2, 2012; *Med. Phys.* 39, 3935 (2012).
- N. Ozturk, B. Smith, and B. Aydogan, "Comparison of global versus local gamma criteria for planar dose IMRT QA," presented at 2011 AAPM/COMP Joint Meeting, Vancouver, Canada, July 31- August 4, 2011; *Med. Phys.* 38, 3590 (2011).
- B. Aydogan, G.O. Kavak, M. Koshy, N. Ozturk, M. Yeginer, B. Smith, P. Patel, A. Awan1, M. Surucu, R.R. Weichselbaum, D. Rondelli, "Initial clinical experience with linac-based intensity modulated total marrow irradiation (IM-TMI)," presented

at ASTRO's 53rd Annual Meeting, Miami Beach, Florida, Oct 2-6, 2011; International Journal of Radiation Oncology Biology Physics 63, S66-S67 (2011).

- L.H. Toburen, M. Dingfelder, N. Ozturk, W. Friedland, W.E. Wilson, J.L. Shinpaugh, and H.G. Paretzke, "Sensitivity of electron transport calculations to elastic and inelastic scattering cross sections," in Proceeding of the 12th L.H. Gray Workshop: 6th International Workshop on Molecular Probes of Cellular Radiation Response, St. Catherine's College, Oxford, UK, pp.82-84, 2003; Radiation Research 161, 106-107 (2004).
- L.H. Toburen, W. Friedland, M. Dingfelder, N. Ozturk, C. Christou, R.D. DuBois, G. Lapicki, J.L. Shinpaugh, C.G. Drexler, E.L.B. Justiniano, and H.G. Paretzke, "Secondary Electron Production and Transport Induced by Fast Protons in Thin Foils," in Applications of Accelerators in Research and Industry; Proceedings of the 17th International Conference on the Application of Accelerators in Research and Industry CAARI, J.L. Duggan and I.L. Morgan eds., American Institute of Physics Conference Proceedings, Woodbury, NY, AIP 680: pp. 28-31, 2003.

(f) Other works that are publically available (websites, interviews, publications in the popular press, testimony, computer programs, protocols, reagents, inventions, patents not listed above, etc.)

2013 Quiz on the AAPM Code of Ethics for Medical Physics Continuing Medical Education (MPCEC) credit, AAPM Online Learning Center  
<http://www.aapm.org/education/ce/newquiz.asp?cid=9:80&qid=2129>

(j) Works in review, in preparation, etc. not yet publically available [list ONLY if available for BSD review]

Kang-Hyun Ahn, Naim Ozturk, Brett Smith, and Bulent Aydogan, "Preplanning of stereotactic radiosurgery using the Brainlab iPlan treatment planning system," Submitted to IJROBP (under review).

B Aydogan, M Koshy, M Surucu, G Kavak, M Yeginer, Kang-Hyun Ahn, N Ozturk, B Smith, V. De Masio, A Awan, P. Patel, D Rondelli, and R Weichselbaum, "Clinical Experience with Intensity Modulated Total Marrow Irradiation: Evaluation of Setup Errors and Dosimetric Uncertainty," submitted to IJROBP (under review).

N. Ozturk and C. Skorou, Quiz on our paper entitled "Ethics and Professionalism in Medical Physics: A Survey of AAPM members" for Medical Physics Continuing Medical Education (MPCEC) credit, prepared for AAPM Online Learning Center (under review).

## **FUNDING**

(a) Past:

NIH/NIBIB 3 T32 EB002103-22S1. PI: M. Giger. My role: Co-investigator. Title: "Development of a Comprehensive Bioethics Curriculum for Medical Physics Trainees." Total direct costs: \$100000. Annual salary recovery or effort: 15%. Project period: 10/1/2011-9/30/2012.

## HONORS, PRIZES, AND AWARDS

1991                    Sigma Xi, The Scientific Research Society  
2011-2012            Ethics Fellow, MacLean Center for Clinical Medical Ethics, University of Chicago

## INVITED SPEAKING

2012                    “Medical Physics Ethics in Action,” Interactive Professional Session, R Fahrig, G Frey, P Halvorsen, W Hendee, N Ozturk, J Prisciandaro, C Serago, and G Starkschall, 54th Annual Meeting of AAPM, Charlotte, NC, July 27- August 2, 2012; *Med. Phys.* 39, 3935 (2012).  
The cases/scenarios discussed by this panel were based on our 2102 survey of AAPM members on ethics and professionalism in medical physics practice.

2012                    Presentation to the AAPM Ethics Committee on the results of the ethics and professionalism survey of AAPM membership during the 54th Annual Meeting of AAPM, July 27-August 2, Charlotte, NC.

## INVITED, ELECTED, OR APPOINTED EXTRAMURAL SERVICE

2012-                    Member, Ethics Committee, American Association of Physicists in Medicine  
2010-                    Reviewer for *Journal of Applied Clinical Medical Physics*  
2011-                    Reviewer for *Medical Physics*, *International Journal of Radiation Oncology Biology Physics*, and *Physica Medica: European Journal of Medical Physics*  
2013-                    Abstract reviewer, Annual Meeting of American Association of Physics in Medicine

## PROFESSIONAL SOCIETIES

American Association of Physics in Medicine (AAPM), 2002-  
American Society for Therapeutic Radiation Oncology (ASTRO), 2013-  
European Society for Radiotherapy and Oncology (ESTRO), 2014-

## EDUCATION

### The College (B.A., B.S.):

1985-1993            Teaching Assistant for undergraduate level engineering physics courses. University of Toledo, Department of Physics and Astronomy, Toledo, OH.  
1993                    Instructor for undergraduate level engineering physics courses. University of Toledo, Department of Physics and Astronomy, Toledo, OH  
1994,1996-97        Lecturer for undergraduate level physics courses. Dept. of Meteorology, Istanbul Technical University, Istanbul, Turkey.

### Graduate programs (Ph.D.):

2009-                    Co-instructor for MPHY 35100 (Physics of Radiation Therapy)  
2011-                    Co-instructor for MPHY 39700 (Health Physics)

### Pritzker School of Medicine (M.D.):

N/A

### Graduate medical education (residency and clinical fellowships):

(a) Didactic

- 2008- Lecturer for *Introduction to Radiation Therapy Physics* for incoming radiation oncology and physics residents: taught sections on electron beams and/or brachytherapy (2-3 hr lectures)
- 2013- Lecturer for *Basic Physics of Radiology*; lectures for radiology residents: taught sections on radiation protection and dosimetry (3 lectures, 45 min each).
- 2012-2013 Lecturer for *Responsible Conduct of Research Summer Course*, Institute for Translational Medicine (1.5 hour lecture/case discussion on the ethics of "Authorship and Publication Practices").

Continuing medical education:

Other:

- 2009-2011 Mentored medical physics residents during their rotation on brachytherapy, treatment planning and QA (Dept. of Radiation Oncology, UIHHSS)
- 2012 Supervised a medical dosimetry trainee on a project on the use of Varian Eclipse electronic compensation algorithm for whole breast planning (UIHHSS).
- 2012 Presented two lectures on safety and quality in radiation therapy to the personnel of the Radiation Oncology Department (UIHHSS).
- 2013 Mentored a senior graduate student (Martin Andrews) at UIHHSS during Fall 2013 who shadowed physics-dosimetry to gain clinical experience.

**CLINICAL**

- 2008-2009 Supervise clinical physics services at two affiliated suburban hospitals.
- 2009- Provide clinical physics services at the affiliated Radiation Oncology clinic at the University of Illinois Hospital and Health Sciences System.

**SERVICE**

**University of Chicago**

Committee membership:

- 2009 Committee on Medical Physics

Leadership:

- 2008-2009 Chief of Clinical Physics at two affiliated suburban hospitals
- 2013- Chair, Curriculum Committee, Graduate Program in Medical Physics
- 2013- Lead Physicist for SRS (frame based and frameless), and SBRT at the Dept. of Radiation Oncology, University of Illinois Hospital and Health Sciences System.

Other:

- Various Interviewed radiation oncology and medical physics residency applicants.  
Reviewer of applications to the GPMP program.

**Extramural (not indicated above)**

Other:

- 2012- Member, Ethics Committee, American Association of Physicists in Medicine
- 2011- Member, Ethics Committee, University of Illinois Hospital & Health Sciences System
- 2011- Member, QA Committee, Department of Radiation Oncology, University of Illinois Hospital and Health Sciences System