



## Joseph Bordogna Ph.D.

March 22, 1933 - November 25, 2019

Joseph Bordogna, Ph.D. March 22, 1933 – November 25, 2019

Joseph Bordogna, Ph.D., a resident of Wynnewood, Pennsylvania passed away peacefully Monday morning, November 25, 2019 at Lankenau Hospital surrounded by family and friends.

Joseph Bordogna was the Alfred Fitler Moore Professor Emeritus of Engineering at the University of Pennsylvania where he had been Dean of the School of Engineering and Applied Science and Director of The Moore School of Electrical Engineering. Professor Bordogna's leadership in engineering was recognized by President Clinton who appointed him to the National Science Foundation and by his peers who elected him worldwide president of the Institute of Electrical and Electronics Engineers. His service to the community included helping to found PRIME, the Philadelphia Regional Introduction for Minorities to Engineering and the Commonwealth of Pennsylvania's Ben Franklin Technology Partners' initiatives for university-industry technology commercialization.

Joseph Bordogna was born on March 22, 1933 in Scranton, Pennsylvania to Raymond and Rose (Yesu) Bordogna. Shortly thereafter, the family moved to South Philadelphia where his father worked as a carpenter at the U.S. Naval Shipyard and his mother as an assembly worker at a local manufacturing

plant.

After graduating from Philadelphia's John Bartram High School as the Valedictorian and winner of a General Electric prize for academic achievement, Joseph attended the University of Pennsylvania's Moore School of Electrical Engineering on a Naval ROTC scholarship. After graduating with a Bachelor of Science in Electrical Engineering in 1955, he served in the U.S. Navy from 1955 to 1958 as Lieutenant on the battleship U.S.S. New Jersey and the destroyer U.S.S. Huse. In 1957, he was awarded a commendation as Operations Officer of the flagship of the naval unit which achieved the world's first space capsule recovery in Operation Jupiter.

Following his naval service, Joseph Bordogna attended the Massachusetts Institute of Technology on a Whitney Fellowship where he earned a Master of Science degree in 1960. Upon graduation from MIT, he returned to the Philadelphia area as an engineer at the Radio Corporation of America's Plant in Camden, New Jersey where he helped develop early laser communications systems, electro-optic recording materials, transistor-based computing systems and holographic television playback systems from 1958-1964. At RCA, he was a member of the team that built the first semiconductor laser voice communication system that operated at room temperature. During this period, he also continued his education at the University of Pennsylvania where he earned the degree of Doctor of Philosophy in Electrical Engineering in 1964.

Upon receiving his Ph.D., he joined the faculty of the University of Pennsylvania as an assistant professor of Electrical Engineering in 1964. His career at Penn spanned 48 years and a variety of roles until his full-time retirement on May 1, 2012. He continued to serve as the Alfred Fitler Moore Professor Emeritus of Engineering until his death.

In addition to his academic focus, Professor Bordogna served as the founding

faculty director of Stouffer College House, a living-learning student residence at Penn from 1972 to 1978.

Professor Bordogna led the founding of Penn's highly acclaimed joint-degree Management and Technology Program, combining the strengths of the School of Engineering and the Wharton School.

From 1991 to 2005, Dr. Bordogna served at the U.S. National Science Foundation (NSF), first as the head of NSF's Directorate for Engineering. He was appointed acting Deputy Director in 1996 by then-NSF Director, Dr. Neal Lane. In 1999, he was named Deputy Director by President Clinton and following Senate confirmation, he subsequently served as Deputy Director and Chief Operating Officer. Complementary to these tasks, he was a member of the President's Management Council, Federal Government's Technology Reinvestment Project Team (TRP), Partnership for a New Generation of Vehicles Committee (PNGV), U.S.-Japan Joint Optoelectronics Project and chaired committees on Manufacturing, Environmental Technologies, and Automotive Technologies in the President's National Science and Technology Council (NSTC). During his service on the NSF he was the then longest-serving Deputy Director in the agency's history. In 2005, a high triangular plateau in the South Holland Range of the Shackleton Coast of Antarctica, was named Bordogna Plateau, in recognition for his "key leadership and guidance to the United States Antarctic Program at a number of critical points in its evolution."

#### Associations, Honors & Awards

Throughout his career, Dr. Bordogna worked to include underrepresented populations in science, technology, engineering, and mathematics (STEM) education. He was a founder in 1973 of PRIME (Philadelphia Regional Introduction for Minorities to Engineering) and served on the board of the

Philadelphia Partnership for Education, community coalitions providing, respectively, supportive academic programs for K-12 students and teachers. He was a fellow of the American Association for the Advancement of Science (AAAS), the American Society for Engineering Education (ASEE), the Institute of Electrical and Electronics Engineers (IEEE), and the International Engineering Consortium. IEEE members elected him to the office of president-elect for 1996 and president for 1997.

He was awarded the 2008 IEEE James H. Mulligan, Jr. Education Medal which recognizes “the importance of the educator's contributions to the vitality, imagination, and leadership of the members of the engineering profession.”

Other notable distinctions include:

1966: Author, Electric Networks: functions, filters, analysis (McGraw-Hill Electrical and Electronic Engineering Series)

1974: American Society Engineering Education (George Westinghouse award 1974)

1996-1997: University City Science Center, Chairman

1998-1999: Fellow of the American Association for the Advancement of Science (chair engineering section)

Institute of Electrical and Electronics Engineers (chairman Philadelphia section 1987-1988, president 1998, Centennial medal 1984)

1989: The University of Pennsylvania Alumni Award of Merit

2004: Leadership in Technology Management Award from the International Conference on Management of Engineering and Technology

2005: Eminent Member of Eta Kappa Nu – Electrical and Computer Engineering Honor Society,

2005: Honor Society of the American Society of Mechanical Engineers (Johnson & Johnson Diversity medal),

2005: Lifetime Achievement Award of the D.C. Council of Engineering and Architectural Societies

2005: U.S. Government Leadership Award of the Semiconductor Industry Association

2005: Honorary Doctorate of Humanities from North Carolina AT&T State University

2006: National Science Foundation Distinguished Service Medal

Member Sigma Xi – Scientific Research Honor Society

Member Tau Beta Pi – Engineering Honor Society

Member Phi Beta Delta – International Scholars Honor Society

#### Survivors & Funeral Services

Professor Bordogna is survived by his wife of 52 years, Frances Theresa (Wyandt) Bordogna, by his son Raymond Albert Bordogna, his daughter-in-law Whitney Deas Bordogna and his granddaughter Avery Marguerite Bordogna.

The family will receive guests Monday, December 2 from 6:00 p.m. to 8:00 p.m. in the Chadwick & McKinney Funeral Home, 30 E. Athens Avenue in Ardmore, PA and after 9:00 a.m. on Tuesday, December 3 at the Presentation BVM Church, 204 Haverford Road in Wynnewood, PA to be followed by a Funeral Mass at 10:00 a.m. A reception will follow at The Merion Cricket Club; 325 Montgomery Ave, Haverford, PA 19041. His burial will be in a private service at Cathedral Cemetery in Scranton, PA.

Contributions in the memory of Dr. Bordogna may be made to the Police Athletic League (PAL) of Philadelphia([www.phillypal.org/support/](http://www.phillypal.org/support/)) or by calling the Chief Development Officer at 215-291-9000, ext. 101.

# Previous Events

## The family will receive guests

DEC 2. 6:00 PM - 8:00 PM (ET)

Chadwick & McKinney Funeral Home, Inc.  
30 East Athens Avenue  
Ardmore, PA 19003  
(610) 642-6303

## The family will receive guests

DEC 3. 9:00 AM - 9:45 AM (ET)

Presentation B.V.M. Church  
204 Haverford Road  
Wynnewood, PA

## Funeral Mass

DEC 3. 10:00 AM (ET)

Presentation B.V.M. Church  
204 Haverford Road  
Wynnewood, PA

# Tribute Wall

FD

“ I just heard of Joe’s death. (I left the NSF in ‘93 and lost contact with many of our peers.) I read with great interest his many professional accolades. They are important, of course. But what most interested me about Joe is the fact that I came to know him as a good, decent man. Let me share just one instance.

*In the early ‘90’s, when Joe had just been appointed the head of NSF’s Engineering Directorate, I was working in advocating for grants to women and minorities in engineering and also for HBCUs. We received a grant application from one of these universities. The university had never had a grant in engineering from the NSF before. The proposal was not one that would usually “fit” a standard NSF award and it had its detractors. But it was important because, for Joe, it would raise the presence of engineering as a field of study for poor and minority students in rural areas.*

*As a result of Joe’s effort the grant was awarded. We both flew down to the university and Joe awarded it personally. It was like we were bringing manna from heaven. That first grant was one of the foundations that formed the basis for later awards in engineering to that university.*

*Rest in peace, Joe.*

*Dale Draper*

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**Frank Draper** - January 27, 2025 at 03:29 PM

EM

“ Never a finer man. I miss our conversations about empowering the greatness in people and in our institutions, Joe. You live on in the people whose higher aspirations you have encouraged, me one of them. Condolences to the Bordogna family and friends.

*Respectfully, Elsie Maio*

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**Elsie Maio** - July 13, 2020 at 02:47 PM

BF

“Wow! What a tremendous person and professor Dr Bordogna was. I had him in my senior year in 1965 ( his first year teaching at Penn) and what a fantastic teacher and influence was. He was so patient in answering any dumb questions I had. I was a fair EE student but a few weeks after I had been accepted into the Wharton MBA program he came to me and asked me to think about a Masters in EE. I was surprised and humbled that he thought I was worthy of it and I felt terrible that I had to tell him about the Wharton acceptance. Being such a kind and sweet person I felt awful telling him about Wharton because he was so supportive of wanting me to go. His accolades from his students here and list of accomplishments are truly amazing but not unexpected. I'm sure he is up there now getting all the electrical networks and laser devices humming at full capacity. Bob Finney, EE65

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**Bob Finney** - February 22, 2020 at 03:11 PM

JA

“Dr Bordogna was, without a doubt, one of the best professors I had the opportunity to learn from. He wasn't just an academician, not just an engineer; he was a friend to his students. He went out of his way to help his students, unlike any other faculty member that I can recall.

Five years ago, I had the occasion to send him a greeting through a mutual friend. I had not seen him for some thirty years, since graduation from SEAS. Dr Bordogna remembered me as if it were yesterday.

He was a true statesman, a professional, a friend. I surely will miss him.

-John Adamson

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**John Adamson** - February 19, 2020 at 12:19 PM

CB

“ As an IEEE staffer in Washington, I was a great admirer of Joe Bordogna, whose vision and leadership in support of the nation's science and engineering enterprise was inspirational. He was a kind man and a source of sage advice to all who had the opportunity to know him, and will be greatly missed.

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**Chris Brantley** - February 16, 2020 at 08:22 AM

PH

“ Joe was my mentor and friend. He changed me for the better in so many ways. Thanks Joe and God bless and keep you.

*Paul Herer*

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**Paul Herer** - January 19, 2020 at 11:24 PM

VM

“ Dr. Joe Bordogna was a great supporter of the Executive Masters in Technology Management (EMTM) Program at UPenn, he was dedicated towards growing the next generation of diverse leaders for science and innovation for our nation. I deeply appreciated his friendship and counsel, and he played an important role in my career and personal growth.

*Joe - Rest In Peace, and hope to see you on the over side!!*

*Victor McCrary*

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**Victor McCrary** - December 12, 2019 at 03:08 PM

SJ

“ Your family has my deepest sympathy. I am grateful for Dr. Joseph Bordogna who had a bold vision and unwavering commitment to diversifying Engineering. He was my Dean of the School of Engineering and Applied Science at the University of Pennsylvania. He leaves a legacy of positively impacting and directing the career paths of THOUSANDS of minority students. The World Needs More Good Men and Allies like Dr. Joseph Bordogna. May He Rest In Peace--Stephanie Aisha Steplight Johnson, PhD

Stephanie Johnson - December 03, 2019 at 10:56 PM

FP

“ From, Your Colleagues at Drake Star Partners purchased the Serenity Wreath for the family of Joseph Bordogna Ph.D..



From, Your Colleagues at Drake Star Partners - December 02, 2019 at 01:38 PM

TC

“ I worked with Dr. Bordogna while I was with NSF, and he mentored me when I was just a simple junior program analyst. During some of the most difficult times of my career, he reminded me of my strengths and kept me focused on how much I could contribute. He helped me to become who I am today, and I will never forget him. I speak of him often, and will remember him fondly. I will keep him and his family in my prayers. God bless them all.

Tricia Crumley - December 02, 2019 at 01:31 PM



“ *Emerald Garden Basket was purchased for the family of Joseph Bordogna Ph.D..*



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December 01, 2019 at 09:13 PM



“ *Treasured Lilies Spray was purchased for the family of Joseph Bordogna Ph.D..*



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November 29, 2019 at 11:46 AM



“ *IEEE Education Society purchased the Medium Dish Garden for the family of Joseph Bordogna Ph.D..*



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**IEEE Education Society** - November 29, 2019 at 10:24 AM