

“Perspective and Balance: John Fedchock,” included an interview of John by **Eric Nemeyer** '80 (MM) and **Tony Garcia** (MM), photographs, and a solo transcription and analysis.

**1992 Jennifer Hambrick**—a poet, musician, and midday host of Classical 101, WOSU Public Media in Columbus, Ohio—sends an update. She writes, “My poem ‘Thorn Tree’ was set to music as an orchestral song by composer Jacob Redd and given its world premiere in April by the McConnell Arts Center Chamber Orchestra of Worthington, Ohio. The performance marked the culmination of ‘The Poet’s Song,’ an innovative project showcasing selected poems in new musical settings, and was conducted by Antonie Clark, assistant conductor of Rochester’s 2017 Gateways Music Festival, in association with Eastman.” Jennifer maintains a blog, Inner Voices, at [Jenniferhambrick.com](http://Jenniferhambrick.com).

**1993 Elizabeth (Betsy) Blades** (DMA) (see '84).

**1995 Peter Fletcher** (MM) will be the featured artist at the Chamber Music Festival of the Black Hills in Rapid City, South Dakota, in July.

**1998 Vicente Avella** (MM) writes that he’s released his second album, *Rising* (Pandora’s Boombox Records).

**2002** Pianist **Mirna Lekic** has released a recording, *Eastern Currents* (Romeo Records), with Ensemble 365, of which she’s a founding member. She writes: “The album presents a journey through contemporary Asian music and features works written in the past 40 years by Franghiz Ali-Zadeh, Bun-Ching Lam, Ramin Heydarbeygi, Ravi Shankar, Toru Takemitsu, and **Ming-Hsiu Yen** '03.”

**2003 Ming-Hsiu Yen** (see '02).

**2018 Jacek Blaszkiewicz** (PhD) (see '13 College).

## School of Medicine and Dentistry

**1975 Patrick Bastow** (D) has released a book, *My Heroes and Their Stories of Survival* (Bookbaby) about the memories and emotions shared with him by his patients who were World War II combat veterans.

He writes, “The veterans suggested that something meaningful be done with this information. This labor of love was completed in recognition of their sacrifices.” Patrick practiced dentistry at the Canandaigua, New York, VA Medical Center for 38 years.

**1977 James (Jim) Powers** (MD) has published a book, *Value Driven Healthcare and Geriatric Medicine: Implications for Today’s Changing Health System* (Springer). Jim is a geriatrician and professor of medicine at Vanderbilt University.

**1982 Howard (Randal) Woodward** (Flw) retired after 38 years practicing medicine in Omaha, Nebraska. Randal was a founder and president of Nebraska Spine and Pain Center, as well as founder and chairman of the board of the Nebraska Spine Hospital.

**1988 James Musser** (MD/PhD) has been named president of the Federation of American Societies for Experimental Biology. The federation represents 130,000 members in 30 societies nationally, and is the main policy advocacy voice of biological and biomedical researchers.

**2017 Victoria DiMarco DiTramontos** (Res) (see '08 College).

## School of Nursing

**1947 Marjorie Fenton Garrett** writes of the death of **Marjorie (Midge) Whitehouse Raysor** last March. The classmates kept in touch since their graduation. Midge was a registered nurse at the University’s Strong Memorial Hospital and later worked as a hospice nurse.

**1978 Cherie Pensoneault** (see '78 College).

## Simon Business School

**1968 Roger Snell** (MBA) (see '63 College).

**1974 Len Joy** (MBA) (see '73 College).

**1979 John Caligiuri** (MBA) has published his third novel, *Last Roman’s Prayer* (Insomnia Publishing).

**1985 Lynn Brussel** (MBA) (see '78 College).

**1993 Phil Fraher** (MBA) has been named chief financial officer of Zilliant.

**1999 Christopher Burns** (MBA) (see '98 College).

**2000 Rich Klein** (MBA) has been named president of ConServe.

**2004 Doug Austin** (MBA) (see '98 College).

**2006 Justin Sansone** (MBA) (see '04 College).

**2015 Hiatt Zhao** (MS) (see '06 College).

## Warner School of Education

**2003 Emily Bones** (MS) (see '01 College).

**2005 Shira May** (PhD) has been named executive director at Partners in Restorative Initiatives, offering restorative practices education and services in schools and organizations in the Rochester area.

**2015 Emily Hessney** (MS) (see '12 College).

## In Memoriam

### ALUMNI

**Gerald D. Meyer** '43, March 2018

**Julia Small Boniface** '44N, April 2018

**Mary-Helen Scanlon Kennedy** '44E, April 2018

**Helen Waasdorp Henion** '45, '46N, April 2018

**Charlotte Butcher Madsen** '45E, July 2017

**Thelma Harper** '46E, October 2016

**Mary Jane Pogue Hollenbeck** '46N, April 2018

**Alvin N. Morris** '47M (MD), May 2018

**J. Ernest DuBois** '48, '49 (MA), May 2018

**Donald P. Harnish** '48 (PhD), March 2018

**Ruth Plass Henry** '48N, April 2018

**Ruth Rickers Klemmer** '48, April 2018

**Sarah King Kline** '48, May 2018

**Frederick J. Raible** '48, April 2018

**Walter A. Campbell** '49 (Mas), '72S (MBA), May 2018

**Doris Braund Kerber** '49, April 2018

**Gertrude Saperstone Sheinfeld** '49, '82 (MS), May 2018

**Townsend P. Burge** '51, February 2018

**Wade L. Callender** '51 (PhD), April 2018

**Mary Moore Remington** '51E, April 2018

**F. Glenn Webster** '51, May 2018

**Ann Kuchmy West** '51, May 2018

**Richard G. Cornell** '52, April 2018

**Alfred D. Katz** '52M (Res), December 2016

**Bernard Levinson** '52M (MD), January 2018

**Margaret Harter Pellett** '52E (MM), April 2018

**Ralph M. Woodworth** '52, May 2018

**Warren B. Bastian** '53, April 2018

**Margaret Thomson Colgan** '53M (MD), April 2018

**Enzo A. Faga** '53, April 2018

**Marlene Herr** '53, May 2018

**Ruth Alice Reinhardt** '53N, April 2018

**Charles L. Wilson** '53, March 2018

**James C. Barrows** '54, April 2018

**Harold L. Brodell** '54M (MD), May 2018

**Emmanuel C. Paxhia** '54, February 2018

**Robert P. VanDeusen** '54W (Mas), September 2016

**Donald C. Robbins** '55E, April 2018

**Julie Keyser Sanford** '55, '56N, '59W (MS), April 2018

**Janice Fishbaugh Chapman** '56, May 2018

**Joseph D. Viola** '56, December 2017

**Charles B. Kaplan** '57, May 2018

**Stephan E. Mergenhagen** '57M (PhD), March 2018

**G. Graydon Curtis** '58, May 2018

**Dorothy DiSpensa** '58 (MS), April 2018

## TRIBUTE

## Emil Wolf: 'A Scientist and Friend Like No Other'

A student of the noted physicist counts up some of his mentor's contributions to science and to his colleagues.

**1** Emil Wolf, the former Wilson Professor of Optical Physics, a faculty member in the University's Institute of Optics and the Department of Physics and Astronomy, died in June at the age of 95. He is survived by his children, Bruno and Paula, and his beloved wife, Marlies. He was decorated with numerous prestigious national and international awards, honorary degrees, and appointments. He was my mentor and my friend and my measuring stick for what is good and what is decent.

**2** He was a refugee. When the Nazis invaded Czechoslovakia in 1939, Emil's brother, Karel, joined the Czech army. Emil was too young for the army and their parents sent him to Italy in hopes that he could somehow get to France or England. Trading valuable stamps his father had collected, Emil made his way from Prague to the Italian coast and then illegally into France by boat. Once in Paris, he found work with the Czech government in exile with whom he evacuated to Britain when Paris fell. There he completed high school, attended Bristol University, and eventually earned his PhD. None of his extended family survived the Holocaust except Karel and one cousin who both settled in Canada.

In England, Emil came to be friends with future Nobel laureate and Hungarian refugee Dennis Gabor. Certainly Gabor recognized Emil's genius, but in Emil's recollection, it was simply good fortune,

"I was very lucky, at these meetings, I got to know Gabor." Gabor introduced him to another future laureate, Max Born, who had himself left the rising virulent xenophobia and religious bigotry in 1930s Germany. Born and Wolf, as the duo would be known, went on to write what is now the single most cited book in physics, *Principles of Optics*. Of Born, Emil said, "It was a wonderful collaboration. He was a remarkable person and I feel extremely fortunate that I was able to work with him. Not only as a scientist. He was a wonderful human being." He also met his closest friend and collaborator, Len Mandel. There, in the smoking wreckage of postwar England, a country trying to rebuild and resurrect itself welcomed people fleeing the very worst that man can do to man and by chance gave refuge to some of the greatest minds of 20th-century physics.

**3** In 1958, Robert Hopkins, then director of the institute, traveled to England for a conference and to meet with Emil. The meeting nearly didn't happen. The letter from Hopkins got misfiled by a secretary and was only discovered by Emil as he was searching for another misfiled document. "It was all a matter of luck, particularly that phone call in Paris at three in the morning saying



**UNIFYING SPIRIT:** Wolf is credited with providing the first unified framework for describing the observable, measurable properties of light, work now known as the Wolf equations.

to get on the lorry, the truck. . . . It just shows you how much luck there is in life. First to get out of Paris and then to get to America." Of course the meeting did happen and Emil came to the institute and shortly thereafter joined the physics department. He recruited his friend Mandel and then the two of them brought in a bright young talent named Joseph Eberly, and the modern face of optics and optical physics at Rochester was shaped. All a matter of luck.

**4** Among the graduate students in the 1990s, Emil was viewed with a sort of awe, in the way that small children might believe that adults who can drive a car must possess magical superpowers. Those who could muster the courage to attend office hours or otherwise engage him beyond the classroom were rewarded with the experience of spending time with one of the

Anyone who collaborated with him eventually had the experience of a real barn burner of an argument at the blackboard, only to be followed by having him take your arm and lead you away for a coffee break saying, "Well, that's OK, we're still friends after all." And we were.

most generous, kind, and open people you could hope to meet. I was fortunate to join his group in 1995. He took me aside and explained that he was then 72 years old and that while any advisor could die at any time, the odds of him surviving to the end of my thesis were worse than for younger advisors. I shouldn't worry though: he had arranged with a recent graduate of his group, Dr. Daniel James, that if he should die before I could defend, Daniel would supervise the rest of the thesis. Emil was the sort of man who stared down into the abyss of the great inevitability and came away making contingency plans for his students.

He was deeply committed to the welfare of his students and to equality and justice. While he could occasionally get himself flustered by some new process or technology in the way that academics of a certain age are allowed to do, I only ever saw him truly angry when he thought a student had been treated unfairly because of race or creed or gender or orientation. Maybe it was his own history, or maybe it was built in, or maybe it was the output of a clear moral compass processed through one of the greatest intellects on the planet, but he would have none of it. Emil took people one at a time and accepted them on their merits. He would not brook anything else in his sphere of influence as long as he could do something about it.

**5** In 1865, J. C. Maxwell presented the first unified field theory in physics, uniting electricity and magnetism, and in the process explained light as fundamentally an electromagnetic phenomenon. But in as much as the physics of a ball rolling down an inclined plane fails to explain why water boils the way it does, Maxwell's theory failed to satisfactorily explain the observed behavior of light. Various statistical theories of light were thrust forward with sometimes overlapping and sometimes disjoint realms of validity. In 1954, Emil published the first of a long series of papers on the statistical nature of light, introduced the double wave equations, the Wolf equations, and provided a unified framework for the panoply of quantities describing the observable, measurable properties of light. As Peter Milonni so aptly described in 2012, modern classical coherence theory seems almost trivial. It only does so because Emil's brilliant foundation makes it all so clear. Before Emil, there was just chaos, and now there are the Wolf equations.

**6** He was a scientist of the highest caliber, but more importantly to those of us who knew and loved him, he was a friend like no other. My favorite picture of him was taken with the late Len Mandel, on vacation, sitting at the beach together, notebooks out and contemplating together the deep mysteries of the universe. While I'm sure the science was important to him, I'm also sure it was just as important to be working with his friend. Friendships with Emil were for life. Anyone who collaborated with him eventually had the experience of a real barn burner of an argument at the blackboard, only to be followed by having him take your arm and lead you away for a coffee break saying, "Well, that's OK, we're still friends after all." And we were. And that was all that really mattered.

**7** Of my own time with Emil, all I can manage is to borrow: it was a wonderful collaboration. He was a remarkable person, and I feel extremely fortunate that I was able to work with him. Not only as a scientist. He was a wonderful human being. **R**

—SCOTT CARNEY '99 (PHD)

*Carney is director of the Institute of Optics.*

**E.C. George Sudarshan** '58 (PhD),  
May 2018  
**Keith E. Schmude** '59 (PhD),  
April 2018  
**Robert B. Whitcomb** '59E (PhD),  
April 2018  
**Richard A. Proseus** '60,  
April 2018  
**Joe D. Tipps** '60W (Mas),  
April 2018  
**Sara Barter** '61,  
April 2018  
**Rodney P. Jordan** '61,  
April 2017  
**Sangiem Limbasuta** '61D (MS),  
April 2018  
**Sinclair R. Mackay** '62M (Res),  
May 2018  
**James D. Salvatore** '62M (MS),  
May 2018  
**Bernard Cantor** '63, '68M (MD),  
'73M (Res), August 2017  
**Vincent B. Giordano** '63,  
March 2018  
**Robert D. Guthrie** '63 (PhD),  
February 2018  
**David C. Hodge** '63 (PhD),  
September 2017  
**Joyce Leonard** '63N (Dpl),  
May 2018  
**Charles G. Liddle** '63M (MS),  
April 2018  
**Daniel S. Pettee** '63M (Res),  
May 2018  
**Elizabeth Sheetz Sanders** '63W  
(MA), May 2018  
**Frank A. Scalia** '63,  
May 2018  
**Sonja Schmelzle Simpson** '63W  
(Mas), May 2018  
**Robert Fink** '64, '69 (PhD),  
April 2018  
**Stephen J. Kunitz** '64M (MD),  
April 2018  
**William H. Pirkle** '64 (PhD),  
April 2018  
**Donald K. Rhine** '65W (MA),  
April 2018  
**Harvey Schloss** '65,  
April 2018  
**J. David Torpie** '65 (MS),  
January 2018  
**Alan L. Frohman** '66,  
April 2018  
**Thomas J. Maconkey** '66,  
April 2018  
**Florence Moody** '69W (EdD),  
March 2018  
**Peter C. Reed** '69S (MBA),  
August 2017  
**Mary Mathews Spreter** '69,  
April 2018  
**Carey M. Delcau** '70,  
September 2017  
**R. Bruce Kirk** '70,  
June 2017  
**William S. Kwiatkowski Jr.** '70,  
April 2018

**Audrey Christman** '71,  
March 2018  
**James B. Massengill** '71M (Res),  
January 2017  
**Sandra Corlean Zimm** '71,  
May 2018  
**Sylvia Eissenstat Vicker** '72,  
April 2018  
**John A. O'Sullivan** '73M (Res),  
May 2018  
**Liliana Dicataldo Bloom** '74,  
May 2018  
**Michael C. Broderick** '74S (MBA),  
April 2018  
**Arnold T. Chow** '74,  
May 2018  
**Paul Nicola** '74D,  
March 2018  
**Margaret Marnell-Kroeker** '75,  
April 2018  
**Dorothy Yates Meyers** '75, '87W  
(MS), September 2017  
**Edward P. Zimmer** '75M (PhD),  
April 2018  
**Dominic J. Bona** '76,  
April 2018  
**Donna Kendall Corrigan** '76,  
April 2018  
**Maria Floros** '76E (MM),  
May 2018  
**Joseph M. Tabone** '76,  
April 2018  
**Miriam Tintner Bogdonoff** '78,  
May 2018  
**Elinor Stanton** '78N (MS),  
April 2018  
**Lauren Clark Abbe** '80 (PhD),  
May 2018  
**David J. Buckel** '80,  
April 2018  
**Robert M. Bilotta** '81 (PhD),  
February 2018  
**Kathleen Ogden Welch** '81S (MBA),  
May 2018  
**Charles M. Aull** '82E (MA),  
March 2018  
**Paula Lane** '85S (MBA),  
January 2018  
**Darrell A. Wright** '85,  
May 2018  
**Alan D. Blowers** '86 (PhD),  
April 2018  
**Sandra Ann Eiduson** '90W (EdD),  
March 2018  
**Maureen May** '91N (MS),  
June 2017  
**Patricia Bittner** '92M (MS),  
April 2018  
**Linda Crandall** '95N,  
April 2018  
**William Connick** '98M (Flw),  
April 2018  
**Kristin Moyer Zlogar** '00,  
April 2018  
**Matthew C. Marks** '02E,  
May 2018  
**Indrani Mitra** '08W (EdD),  
March 2018