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ABSTRACT

This paper describes some students, especially at Johns Hopkins University, Maryland, who have graduated from college 3 or more years before the usual age of 22 or older. Such early graduation is not common, but neither is it extremely rare. Some young graduates seem to have been propelled through college under parental pressure, while others have had facilitative parents who simply helped the child use his or her intellectual precocity well. At Johns Hopkins University, a study was reported in 1982 that described the accomplishments of a number of young graduates. Since that time, 25 more students have completed a bachelor's degree before their 19th birthday. The youngest to graduate from Hopkins graduated at age 15 years 7 months, having graduated from high school at age 12. Young men are more likely to graduate from Hopkins early than are young women, although Johns Hopkins did not graduate its first female undergraduates until 1972. Johns Hopkins had led most other major universities in its flexible age admissions policies. Young applicants are screened carefully, but they need not be high school graduates. Overall, these young graduates have gone on to successful careers, often in academia or medicine. (SLD)



College Graduation Before Age 19, Especially at

Johns Hopkins University 1876-1997

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Johns Hopkins University 1876-1997

Julian C. Stanley and Lois S. Sandhofer

Johns Hopkins University

Graduating from college three or more years before the usual age of 22 or older is not common, but neither is it extremely rare. National news reports have highlighted the most extremely young college graduates, such as Michael Kearney at age 10, from the University of South Alabama in 1995; Adrian DeMello at age 11, from the University of California, Santa Cruz, in 1988; Jay Luo from Boise (Idaho) State University at age 12 in 1982; and Bala Ambati, M.D. degree at age 17 from New York University in 1994. These seem to have been parentally-propelled racers through the educational system, usually not at the most highly selective universities. "Creator" parents--i.e., those who labor from the child's birth to produce a "genius" --are in sharp contrast to "facilitative" parents, who early in their child's life detect marked intellectual precocity and help him or her use it well educationally.

In our Study of Mathematically Precocious Youth (SMPY), begun in 1971, we have observed many other "radical accelerates," such as Donald Marolf (graduate of William Jewell College in Missouri in 1987 at age 15 and Ph.D. in physics, University of Texas, at age 20), and Coleman Miller (Hillsdale College in Michigan in 1984 at age 15 and Ph.D. in astrophysics, California Institute of Technology, in 1990). See Charlton, Marolf, and Stanley (1994) and Stanley (1997).

Less radically accelerated, but superbly educated, is Lenhard

("Lenny") Ng, who in 1996 graduated from Harvard in three years, summa cum

laude in mathematics and Phi Beta Kappa, at age 19. In terms of grade

placement he was only two years accelerated and had a late birthday

(December 8), but his knowledge of mathematics greatly exceeded that of nearly any other college graduate. Also, he had broken most of the middle-school, high-school, and college mathematics competition records. For example, in each of his three college years he was a Putnam Competition Fellow--that is, ranked among the top five undergraduates in the country. Currently, he is working toward a Ph.D. degree in mathematics and physics at the Massachusetts Institute of Technology. For further details, see Charlton, Marolf, and Stanley (1994).

The Johns Hopkins Accelerates

Especially interesting to study are the young graduates of a single college or university throughout its entire history. We did that 15 years ago for Johns Hopkins University, which was founded in 1876 (Stanley & Benbow, 1983). From 1887 through 1982, 32 students had completed the Bachelor's degree before their 19th birthday. Since then, 25 more have done so. Details about all the known young graduates are shown in Table 1.

(Please place Table 1 about here.)

The youngest ever thus far is Chi-Bin Chien, honors B.A. degree in physics in 1981 at age 15 years 7 months. Son of a Johns Hopkins University physics professor, at age 12 he had graduated with much advanced standing from a selective public high school in California.

In the table, data about degrees earned and present occupation are fairly complete. Some summary statistics may bring out features. Nearly half (28) of the 57 have <u>already</u> earned Ph.D. or Sc.D. degrees. At least 8 already have M.D. degrees. At least 4 earned law degrees.

The sex ratio is 45 males to 13 females, i.e., 3.5:1, but Johns Hopkins graduated its first female undergraduates (transfer students) in 1972. The



first of the young women finished in 1979.

As Figure 1 shows, the age distribution (grouped into 12 categories)

(Please put Figure 1 about here.)

is quite negatively skewed. Chien is the only 15-year-old graduate, whereas 63 percent of the group finished at age 18. Even that is remarkable, however, they being at least three years younger than the typical graduate.

Johns Hopkins selects its entering students carefully for ability, so these statistics might not be representative of other universities and colleges. On the one hand, Hopkins attracts able youth. On the other hand, its curricula are more difficult than those of less-selective institutions. I do not know of any persons who graduated from a school of Hopkins' intellectual caliber at less than age 15. The nearest match may be Eugene Volokh, who finished at the University of California, Los Angeles, in 1983, some four months younger than Chien. After nine years as a high-level computer software developer, he entered law school and is now an assistant professor in the UCLA School of Law.

A census like this from other colleges and universities would help us understand better the academic and occupational futures of those who graduate from college unusually young. The Hopkins information and other, less complete, observations suggest, as Pressey (1949) and others have documented, that most fast movers educationally tend to fare well thereafter. They may be a "special breed," however, so we should be cautious not to urge such acceleration for those able youth who are not themselves highly motivated to run the educational track extremely fast. Charlton, Marolf, and Ng provide considerable personal insight into such motivation (Charlton, Marolf, & Stanley, 1994).



Special, Residential Early-Entrance-to-College Programs

We of SMPY believe that for an intellectually brilliant youth to be a
regular residential student in college before about age 16 is quite
difficult socially, although usually not academically. Fortunately, there
are a few college-entrance programs designed specifically for under-age
entrants. Boothe, Beheruz, and Stanley (1997) discuss the eight of which
they are aware. Four are private: one-year Clarkson School of Clarkson
University in New York, four-year Mary Baldwin College (for women only) in
Virginia, four-year Simon's Rock Early Entrance College of Bard College in
Massachusetts, and the one-year Residential Honors Program of the University
of Southern California.

The four state-supported residential programs are the one- or two-year Advanced Academy of the State University of West Georgia; the Georgia Academy of Mathematics, Engineering, and Science of Middle Georgia College, which is a two-year college; the two-year Texas Academy of Leadership in the Humanities of Lamar University; and the two-year Texas Academy of Mathematics and Science of the University of North Texas. Of these four, only the Advanced Academy of Georgia welcomes students from other states.

Each of the eight programs, except for Simon's Rock College (which purports to be only early-entrance), houses its program students separately from the regular-age ones and gives special attention to their social and emotional development. They have far more interacton with their intellectual peers who are also their agemates then they could get in almost any high school.

Eighteen graduates of the Texas Academy of Mathematics and Science (TAMS) have transferred to Johns Hopkins. At TAMS they had completed, via



only college courses, the equivalent of enriched Grades 11 through 14, four years in two. So at about age 18 they became juniors at JHU. Most major in difficult areas such as biology, biomedical engineering, and mechanical engineering. By 1997, 11 had graduated from JHU, seven of them in two years and four in three years (two of these needed only two years but chose to stay one more). On graduation day, the youngest was a few days short of her 17th birthday. None had special academic difficulties. All professed to like being a Hopkins undergraduate, but none remained for graduate or professional study. Most went on to graduate work or medical school elsewhere.

Conclusion

A few youth are able enough, mature enough, and well enough motivated to move along the kindergarten through 16th-grade educational pipelines considerably faster than the usual 17 years or more. There are many combinations of ways to do this (e.g., see Southern, Jones, & Stanley, 1993, page 388, and Brody & Stanley, 1992). In recent years, such special educational opportunities have increased considerably. Johns Hopkins has long led most other major universities in its flexible age admissions policies. Young applicants are screened carefully, but they need not be high school graduates. This and other factors are responsible for its under-age graduates during more than a hundred years. Their subsequent success is remarkable.



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 F. J. Monks, & A. H. Passow (Eds.), <u>International handbook of research</u>

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 <u>Creative Behavior</u>, <u>31</u>(No. 2, 2nd Quarter), 93-119. Commentaries by

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 Evidence of their success. College and University, 58, 361-371.



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The 57 Known Recipients of the Bachelor's Degree from The Johns Hopkins University at Age 18 or Younger, 1876 - 1996

ent tion	Postdoctoral Fellow, Dept. of Biology, Univ. of CA, Berkeley	Postdoctoral Fellow, Dept. of Computer Science, Univ. of CA - Berkeley	Dir. Advanced Technologies in Genetics, Smith Kiine Beecham Pharma- ceuticals, King of Prussia, PA
Current Location	Poste Fello Biolo CA, 1	Postdoct Fellow, Computer Univ. of Berkeley	Dir. Tech in G Smit Beec ceut
Honors & Awards at Graduation	General & departmental honors; SMPY Pre-cocious Youth Award (youngest graduate in JHU's 120 years), 1981; Donald E. Kerr Memorial Medal in Physics, JHU, 1981; Churchill Scholarship (Lewis Douglas Scholar), Cambridge Univ., 1981-1982; NSF three-year Graduate Fellowship.	1981-84. General honors	General honors NJ State Grad. Fellowship, 1981- 1984; Charles & Johanna Busch . Memorial Grad. Fellowship, 1984-1987
Degrees and Dates	B.A. May 29, 1981 in physics Ph.D. in Bio- physics, CA Inst. of Tech. June 15, 1990.	Satisfied degree requirements Dec. 31, 1981; B.A. May 27, 1982 Ph.D. in computer science May 1995	B.A. May 29, 1981 Ph.D. Jan. 16, 1987 Waksman Institute (joint degree) - Rutgers, The State Univ. of NJ and Univ. of Med. & Dentistry of NJ
Major Field	Physics	Mathe- matical Sciences Computer Science	Biology
Birthdate	Nov. 3, 1965	Oct. 29, 1965	Dec. 14,
Age When Baccalaureate Received (Yrs. & Mos.)	15/7	. 16/2	16/5
Name (Chi-Bin	STILLER, Lewis Benjamin	KELLER, John Apeler

· ·	Age When					٠,
Name	Baccalaureate Received	Birthdate	Major Field	Degrees and Dates $^{ m l}$	Honors & Awards at Graduation	Current Location
HASKINS, Charles Homer	16/6	Dec. 21, 1870	History	A.B. June 14, 1887 Ph.D. June 12, 1890	(Phi Beta Kappa began at JHU in 1895. No honors records available.)	
						(at age 21) and then Harvard Univ., & Dean, Graduate School of Arts & Sciences, Harvard Univ.; many other honors
SAEED, Alexander I.	16/8	May 7, 1979	Psychology	Satisfied degree requirements Dec. 1995		Software engineer, Inst. for Genomic Research, Rockville, MD
KALIHER, Kevin Paul	16/11	June 24,	Humanities Studies	B.A. May 24, 1990		Los Angeles, CA Hanna Barbera animation cartoons
REN, Jane	17/0	June 4, 1979	Biology	B.A. May 22, 1996		Medical school student, San Antonio, TX
CAMERER, Colin Farrell	1//1	Dec. 4, 1959	Quantitative Studies	Satisfied degree requirements Dec. 31, 1976; B.A. May 27, 1977		Prof. of Strategy & Behavior Sci., Grad. School of Business Univ. of
				M.B.A. Univ. of Chicago, June 1979 Ph.D. Univ. of Chicago, Dec. 1981	Dupont Fellowship 1978, 1979, 1980; Theodore O. Yntema Research Grant, 1980	Chicago, 1992-94; Rea & Lela Axline Prof. of Business Economics, Caltech, 1994 -
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RIC.	Age When Baccalaureate Received					
Name	(Yrs. & Mos.	Birthdate	Major Field	Degrees and Dates	Honors & Awards	Current
FELDMAN, William Taft	17/3 aft	Mar. 4, 1909	Political Science	B.A. June 8, 1926	Phi Beta Kappa	Died. Nov. 4,
			Philosophy	Ph.D. June 14, 1932		19/6
KIN-Laures, Li-Hsien ("Lily")	17/5 ("Li1y")	Jan. 6, 1967	Chemistry	B.A. May 25, 1984	General honors;	ate
				M.D. June 1988 Northwestern Univ.	aipud Epsilon Delta	ta Marshall, O'Toole; Chicaeo II
STERNRER	Sh1 cm 17 / E			J.D. June 1992 Harvard Law School	Cum Laude	
	(//) OMOTING	Jan. 20, 1936	Mathematics	B.A. May 25, 1984	Phi Beta Kappa;	Harvard Univ.,
				M.A. Nov. 7, 1953	General & Depart- mental honors	•
BA THE CHARLE				Ph.D. Nov. 3, 1956		וומרוובווומרדנצ
Louis Louis	17/7	Oct. 20, 1955	Quantitative Studies	B.A. May 25, 1973		Carnegie-Mellon
			Electrical Engineering	M.S. Engr. Aug. 29, 1973	•	Univ., Research Professor, Computer Science
		•	Computer Science	Ph.D., Cornell Univ., Aug. 19, 1979		
PKESCOTT, Kat Durkish	Katherine 17/8	Sept. 27, 1979	Earth & Plan. Sciences	B.A. May 22, 1997	General honors	
Dielz, Paul Frederick	17/9	Aug. 31, 1959	Electrical Engineering	B.E.S. May 27, 1977 Ph.D. Cornell		Lead software engineer:
				Univ., Aug. 31, 1984	•	t- Technology NSF Center, ship Motorola,
	٠					Land Mobile Products, Schaumbürg
1					:	IL

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	Age When Baccalaureate Recieved (Yrs. & Mos.)	Birthdate	Major Field	Degrees and Dates	Honors & Awards at Graduation	Current Location
FISIKITIO, Joseph Charles	1		rical eering	Satisfied degree requirements Aug. 15, 1978 B.E.S. May 31, 1979 M.S. Engineering	General & depart- mental honors Tau Beta Pi Eta Kappa Nu	Director of Development, Network Products, Div. of Oracle Systems Corp.
BALMACEDA, Margarita Mercedes	17/10	Feb. 16, 1965	International Studies	Satisfied degree requirements Dec. 31, 1982; B.A. May 27, 1983		Professor (political science), University of Toledo, Ohio
				m.a. rinceton 1965 Ph.D. Princeton, June 1996	1996	
EDIDIN, Dan 1 Samuel	17/10	July 30, 1968	Mathematics Mathematics	B.A. May 31, 1986 M.A. May 31, 1986 Ph.D. June 3, 1991	General & depart- mental honors, Phi Beta Kappa	
KAO, Wynn 1	17/11	June 11,	Biomedical Engineering	B.A. May 25, 1989	General & depart- M. mental honors, Ha Scholarships from MI NIH, medical scientist training program	M.D./Ph.D. student, Harvard Med. School/ MIT ist
AMBATI, Jayakrishna	17/11	June 21, 1	Electrical & Comp.Engr.	B.E.S. May 26, 1988 M.D./Ph.D. May 1994 New York University	IEEE Research Award Alpha Omega Alpha	Resident, Optha- mology, Univ. of Rochester
STARK, Eugene l. William	17/11	July 10, B	Electrical Engineering	B.E.S. May 27, 1977 M.S. Jan. 1980, MIT Ph.D. June 1984, MIT	General & depart- mental honors, Tau Beta Pi	Assoc. Professor, Comp. Sci., SUNY-Stony Brook

Name (Y	Age When Baccalaureate Received (Yrs. & Mos.)	Birthdate	Major Field	Degrees and Dates	Honors & Awards at Graduation	Current Location
STOCKTON, Robert Gregory	18/2	Mar. 31, 1964	Mathematical Sciences	B.A. Engineering, May 27, 1982		Research Pro- grammer, Carnegie Mellon Univ.
DICK, Jeffrey Marc	18/3	Mar. 6, 1968	Mathematics Medicine	B.A. May 31, 1986 M.D. May 19, 1990, Medical College of VA		Pediatrician, Rabbinical student, New York, NY
SUNDARAM, Tessa Alvonsaamary	18/3	Oct. 25, 1978	Biomedical Engineering	Satisfied degree requirements Jan. 1997 B.S. Blomedical Eng. May 22, 1997	Tau Beta Pi, 1997, General & Depart- mental honors	
KURRELMEYER, Bernard	18/3	Mar. 27, 1903	Physics	A.B. June 21, 1921 Ph.D. 1924	Phi Beta Kappa	Died 1985; Pro- fessor Emeritus of Physics, Brooklyn College)1931-71).
BACH, Edward Lesem	18/4	Aug. 17, 1962	Mathematics	Satisfied degree requirements Dec. 31, 1980; B.A. May 26,	General & Depart- mental honors; Delta Phi Alpha,	Captec. Malahide Co., Dublin, Ireland
LIU, Kimberley Ellen	18/4	Jan. 26, 1997	Biology	1981 B.A. May 22, 1997	national German honorary society General honors	·
STRAUCH, Eric David	18/5	Dec. 13, 1964	Biology	B.A. May 27, 1983 M.D. May 20, 1988 Univ. of MD Med. Sch.	Alpha Omega Alpha. honorary medical society	Asst. Professor of Pediatric Surgery, Univ. of MD, Baltimore

	Age When Baccalaureate					
Name	Received (Yrs. & Mos.)	Birthdate	Major Field	Degrees and Dates	Honors and Awards	Current
STERN, Eric Groman	18/5	Dec. 15, 1961	Physics	B.A. May 30, 1980		Fermi Labs,
				M.A. Dec. 1983, SUNY - Stony Brook		Batavia, IL
				Ph.D. May 19, 1986		
MERCIA, Pankaj	18/5	Nov. 23, 1973	Biomed. Engr. & Mathematics	B.S. May 21, 1992	General & Depart- mental honors	Harvard Med. School/MIT MD program,
KOTSCHENREIITHER	7/81					Boston, MA
Michael Thomas	0/01	Nov. 24, 1958	Physics	B.A. May 26, 1977 Ph.D. Dec. 1982, Princeton Univ.	Phi Beta Kappa; General & Depart- mental honors; NSF graduate fellowship	Researcher in plasma physics, Univ. of Texas - Austin
WILLIAMS, Michael Grant	18/7	Oct. 21,	Economics	B.A. May 25, 1989	Phi Beta Kappa;	Asst. Professor
				Ph.D. June 9, 1992, Princeton Univ.	General & Depart- mental honors	Business Mgmt.
HOUSER, Christine Marie	18/7	Nov. 16,	Psychology	B.A. May 31, 1986		Resident in
				M.Phil. May 1992, Cognitive Neuro- science		Emergency medicine North Shore Univ. Hospital - NYU
				M.D. Johns Hopkins School of Medicine May 1996		
ZAFREN, Herbert Cecil	18/7	Aug. 25, 1925	Latin	B.A. Mar. 31, 1944	Phi Beta Kappa	Cincinnati, OH:
						Director Emeritus of Libraries &
						Prof. Emeritus of Jewish Bibli-
CA 503						ography, Hebrew Union College
					24	Jewish Inst. of Religion

Name	Age When Baccalaureate Received (Yrs. & Mos.)	Birthdate	Major Fleld	Degrees and Dates	Honors & Awards at Graduation	Current Location
ZUCKER, David Michael	18/8	Sept. 21, 1961	Mathematical Sciences	B.A. May 30, 1980 M.A. May 29, 1981 Ph.D. May 30, 1986	Phi Beta Kappa; Math Sciences Award; General & Departmental honors	Mathematical statistician, National Heart, Lung, & Blood Inst., NIH,
HOSTETLER, Larry Blythe	y 18/8 .	April 16, 1970	Comp. Sci.	B.A. Jan. 1, 1989 M.S. July 31, 1991	General & Depart- mental honors	Programmer in Phoenix, AZ
FAX, David Hirsch	18/8	Oct. 4, 1919	Mechanical Engineering	B. Engr. June 4, 1938	Graduated with honors; Tau Beta P1	Retired from Westinghouse Corp.
ZEI, Paul C.	18/9	April 1, 1970	Biomedical Engineering	B.A. Jan. 1, 1989	General & Depart- mental honors	M.D./Ph.D. program Stanford Univ.
DAGGETT, Lynn Marie	18/9	April 7, 1961	Psychology; Educational Psychology	Satisfied degree requirements Dec. 31, 1979; B.A. May 30, 1980 Ph.D. Duke Univ., May 6, 1984 J.D. degree, Univ. of CT, summa cum laude, May 24, 1987		Asst. Prof. School of Law, Gonzaga Univ., Spokane, WA
WASSERMAN, Harry	y 18/9	Sept. 17, 1899	Mathematics Medicine	A.B. June 11, 1918 M.D. 1922	Phi Beta Kappa	Practicing physician until his death, Feb. 24, 1983

Name	Age When Baccalaureate Received (Yrs. & Mos.)	Birthdate	Major Fleld	Degrees and Dates	Honors & Awards at Graduation	Current Location
KORIN, Anne Hannah	18/10	July 27, 1872	Comp. Sci.	B.S. May 23, 1991	Departmental honors	Ph.D. program, Stanford Univ.
RAFFEL, Sydney	y 18/10	Aug. 24, 1911	Medicine	A.B. June 10, 1920 Sc.D. Johns Hopkins Sch. of Hygiene & Public Health, June 13, 1933 M.D., Stanford,		Prof. Emeritus, Dermatology and Medical Micro- biology, Stanford University
CHANG-SMITH, Esther Sun-A	18/10 A	July 11, 1972	Material Sci. & Engineering	B.S. May 23, 1991 M.S. Metal Sci. Engr., Penn State Univ., 1993		Yale Univ. School of Management, Master of Public & Private Mgmt. expected 1998
ALEXION, Christopher Constantine	18/10	Aug. 9, 1960	Mechanics & Materials Science	B.E.S. May 31, 1979 M.S. Engr. in Mech. Engr., Carnegle- Mellon University, Dec. 1982		Pittsburgh, PA, Self-employed
AKBARI, Suzanne Eliz. Conklin	18/10	July 19, 1965	Humanistic Studies Area	B.A. May 25, 1984 M.A., English, Columbia Univ., May 1989 M. Phil. May 1991 Ph.D. Feb. 1995, English, Columbia		Asst. Prof. of English & Medieval Studies, Univ. of Toronto

ds	Consultant, Mechanicsburg, PA	Rent-a-clue, The Leftbank Operation, Somerville, MA	Presidential Young Asst. Prof., Investigator Award, Dept. of Bio-Y. C. Fung Young engineering, Investigator Award Univ. of CA at of the Amer. Soc. of San Diego Mech. Engr. for Research in Bio-Engineering	Donald E. Kerr Fermi Labora-Memorial Medal tory, Batavia, for Physics IL Honors Scholarship from Physics Dept., MIT	Phi Beta Kappa Deceased 3/1/92. Omicron Delta Formerly, Senior Judge, U.S. District Court for MD, appointed by Pres. Eisenhower for 11fe
Degrees and Dates	B.A. May 25, 1973 M.S. Univ. of Miami in Ohio, June 5, 1975 Ph.D. Univ. of CA at Santa Barbara, March 23, 1978	B.A., May 28, 1987 Ph.D. June 1994, Univ. of Washington, Cognitive Science	B.E.S. May 29, 1981 M.S., Chem. Engr., Stanford Univ., 1982 Ph.D., Chem. Engr., Rice Univ., 1988	B.A. May 30, 1980 Ph.D., MIT, 1986	A.B. June 24, 1919 L.L.B., Univ. of Maryland, June 1922
Major Field	Physics	Psychology	Chemical Engineering	Physics High-energy Physics	History & Pol. Economy Law
Birthdate	July 16, 1954	July 22, 1968	July 8, 1961	July 7, 1961	Aug. 17, 1900
Age When Baccalaureate Received (Yrs. & Mos.)	18/10	18/10	18/11	18/11	18/11
ERIC Pallout Productive ERIC	BIRX, Daniel Lloyd	COREY, Victoria Roslyn D'Ull	FRANGOS, John A.	MUKHERJEE, Aseet	THOMSEN, Roszel Cathcart

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Age When

	Baccalaureate Received					
Name	(Yrs. & Mos.)	Birthdate	Major Field	Degrees and Dates	Honors & Awards at Graduation	Current Location
GREENBERG, Mark David	18/11	July 11, 1963	Humanistic Studies	B.A. May 27, 1982	Phi Beta Kappa; General honors	Junior Research Fellow in
			Law	J.D. Univ. of CA, Berkeley, May 1985	Order of the Colf	philosophy, Jesus College,
			Law	Diploma, post-grad. legal studies, Univ. of Stockholm, Sweden, June 1986	Fulbright Scholar, Gessel Foundation Award	Univ. of Oxford, and Dept. of Justice, Washington, DC
			Philosophy	B. Phil., Univ. of Oxford, June 1990	Marshall Scholar, Oxford Univ.	
YOUNG, Albert Min-Hsien	18/11+	June 13, 1967	Physics and Mathematics	B.A. May 31, 1986	General & Depart- mental honors	Member, technical staff, Lincoln
				M.S.E.E., 1989, MIT		Laboratory, Lexington, MA
				Ph.D., Elec. Engr., Feb. 1994, MIT		
MORISHIGE, Nina Teresa	18/11+	June 5,	Mathematics	B.A. May 27, 1982	Phi Beta Kappa; General & Depart- mental honors; Rhodes Scholar; Churchill Scholar- ship, Cambridge	Doctoral student, Univ. of CA, Berkeley, Math Department
1111000 000	# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•			Univ. (declined)	

¹Unless otherwise noted, degrees were earned at Johns Hopkins. Moreover, unless otherwise noted,major field was identical for undergraduate and graduate work. The first Johns Hopkins baccalaureates (3) were awarded in 1879. At that time they required three years of study, rather than the present four.



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THE CATHOLIC UNIVERSITY OF AMERICA

Department of Education, O'Boyle Hall Washington, D.C. 20064 800 464-3742 (Go4-ERIC)

June 1997

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I would like to call your attention to recent key developments at our web-site. As a joint project with Texas A&M, we have posted a wonderful series of "How-to" papers. These are booklets on a range of measurement and statistical topics. We have also mounted the ERIC database along with a Search Wizard to help you formulate quality searches. The K12ASSESS-L listserv now has over 1,300 subscribers. Our pathfinder, Assessment and Evaluation on the Internet, has received a prestigious 5-star award from the Argus Clearinghouse for its coverage of what is on the internet. This summer we will be creating an on-line library of full-text documents (including newspaper articles, posted essays, and books) from across the internet. In addition we are starting an on-line journal on educational assessment. The big news for the ERIC System is that, starting late summer, you will be able to order and receive documents though the internet (see http://edrs.com/Press/PressReleases/P022197.htm).

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