Curriculum Vitae

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EDUCATION:	B.A.	1965	Westmar College

M.A. 1967 University of Massachusetts

Ph.D. 1969 Wesleyan University

(Dissertation On P-like spaces and their product with P-spaces written under the direction of W. W. Comfort.)

PROFESSIONAL EXPERIENCE:

January 1980 – June 2017 Associate Professor and Professor,

Howard University

September 1970 – December 1979 Assistant Professor, Associate Professor and

Professor, California State University, Los Angeles (Except September 1975 – August 1976, Visiting Associate Professor, SUNY at Binghamton)

September 1969 – June 1970 Visiting Assistant Professor,

Wesleyan University

RESEARCH PUBLICATIONS:

(With W. Comfort and S. Negrepontis) F'-spaces and their product with P-spaces, Pacific J. Math. **28** (1969), 489-502. (MR **39** #3440)

On the existence of \mathfrak{c} -points in $\beta\mathbb{N}\backslash\mathbb{N}$, Proc. Amer. Math. Soc. **21** (1969), 277-280. (MR **39** #922)

Minimal n-prime ideal spaces, Math. Ann. 199 (1972), 97-114. (MR 38 #291)

The existence of certain ultrafilters on \mathbb{N} and a conjecture of Graham and Rothschild, Proc. Amer. Math. Soc. **36** (1972), 341-346. (MR **46** #7041)

Basically bounded sets and a generalized Heine-Borel Theorem, Amer. Math. Monthly 80 (1973), 549-552. (MR 48 #3000)

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(With M. Cates) Partition theorems for subspaces of vector spaces, J. Comb. Theory (Series A) 19 (1975), 13-25. (MR 52 #112)

(With M. Cates, P. Erdős, and B. Rothschild) Partition theorems for subsets of vector spaces, J. Comb. Theory (Series A) 20 (1976), 279-291. (MR 53 #10583)

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Partitions and sums and products – two counterexamples, J. Comb. Theory (Series A) **29** (1980), 113-120. (MR 82b:05020)

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On a conjecture of Erdős, Faber and Lovasz about n-colorings, Canadian J. Math. **33** (1981), 563-570. (MR 82j:05058)

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On density, translates, and pairwise sums of integers, J. Comb. Theory (Series A) 33 (1982), 147-157. (MR 84b:10075)

(With P. Erdős) Enumeration of intersecting families, Discrete Math. 48 (1984), 61-65. (MR 84b:10075)

Partitions and pairwise sums and products, J. Comb. Theory (Series A) **37** (1984), 46-60. (MR 85g:05019)

(With J. Berglund) Filters and the weak almost periodic compactification of a discrete semigroup, Trans. Amer. Math. Soc. **284** (1984), 1-38. (MR 85e:22005)

(With P. Milnes) The ideal structure of X^X , Semigroup Forum **30** (1984), 41-51. (MR 85i:22004)

(With J. Pym) Free groups and semigroups in $\beta\mathbb{N}$, Semigroup Forum **30** (1984), 177-193. (MR 86c:22002)

Ramsey's Theorem for sums, products, and arithmetic progressions, J. Comb. Theory (Series A) **38** (1985), 82-83. (MR 86c:05024)

The minimal ideals of a multiplicative and additive subsemigroup of $\beta \mathbb{N}$, Semigroup Forum **32** (1985), 283-292. (MR 87g:20106)

The ideal structure of the space of κ -uniform ultrafilters on a discrete semigroup, Rocky Mountain J. Math. **16** (1986), 685-701. (MR 88d:54031)

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(With W. Deuber) Partitions and sums of (m,p,c)-sets, J. Comb. Theory (Series A) 45 (1987), 300-302. (MR 89a:05013)

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GRANTS ADMINISTERED:

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Partition theory: sums, products, and ultrafilters, National Science Foundation, MCS 7802330. July 1, 1978 – December 31, 1980.

Ultrafilters and combinatorial partition theory, National Science Foundation, MCS 8100733. June 1, 1981 – November 30, 1984.

Ultrafilter combinatorics: Ramsey Theory and semigroups, National Science Foundation, DMS 8320383 and DMS 8520873. June 1, 1984 – November 30, 1988.

Combinatorics: ultrafilters, semigroups, and Ramsey Theory, National Science Foundation, DMS 8901058 and DMS 9025025. June 1, 1989 – May 31, 1995.

Ramsey Theory, the theory of compact left topological semigroups, and their interactions, National Science Foundation, DMS 9424421. June 1, 1995 – May 31, 1998.

Semigroup algebra at infinity and its combinatorial applications, National Science Foundation, DMS 0070593 and DMS 0243586. July 1, 2000 – June 30, 2006.

Algebra in Stone-Cech compactifications and its combinatorial applications, National Science Foundation, DMS-0554803 and DMS-0852512. July 1, 2006 – June 30, 2012.

Ramsey Theory: Central sets and related combinatorially rich sets, National Science Foundation, DMS-1160566 and DMS-1460023. July 1, 2012 – June 30, 2015 and September 1, 2015 – June 30, 2017.

DOCTORAL DISSERTATIONS DIRECTED:

Dennis E. Davenport, The algebraic properties of closed semigroups of ultrafilters on a discrete semigroup, Howard University, 1987.

Hanson M. Umoh, The ideal of products in $\beta S \setminus S$, Howard University, 1987.

Amha Tume Lisan, The ideal structure of the space of ultrafilters on a discrete semigroup, Howard University, 1988.

Patty J. Anthony, *Ideals in the Stone-Čech compactification of noncommutative semigroups*, Howard University, 1994.

Gregory L. Smith, Partition regularity of sums of products of natural numbers, Howard University, 1994.

Dan Tang, Separating sums from products in N, Howard University, 1997.

Elaine Terry, Finite sums and products in Ramsey Theory, Howard University, 1997.

Shea D. Burns, The existence of disjoint smallest ideals in the left continuous and right continuous structures in the Stone-Čech compactification of a semigroup, Howard University, 2000.

Jillian E. McLeod, *Notions of size in adequate partial semigroups*, Howard University, 2001.

Iris Gugu Moche, The sizes of preimages of points under the natural map from $K(\beta(\mathbb{N} \times \mathbb{N}))$ to $K(\beta\mathbb{N}) \times K(\beta\mathbb{N})$, Howard University, 2002.

Irene S. Moshesh, *Image partition regularity of affine transformations*, Howard University, 2006.

Chase G. Adams, III, Largeness of the set of finite sums of sequences in \mathbb{N} , Howard University, 2006.

Lakeshia R. Legette, Maximal groups in the Stone-Čech compactification of a discrete semigroup, Howard University, 2008.

Kendall Williams, Separating Milliken-Taylor systems and variations theoreof in the dyadics and the Stone-Čech compactification of \mathbb{N} , Howard University, 2010.

John H. Johnson, Some differences between an ideal in the Stone-Čech compactification of commutative and noncommutative semigroups, Howard University, 2011.

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