

David Peter Blecher

Department of Mathematics, University of Houston, Houston, TX 77204-3008
(713-)743-3451 (office); (713) 743-3505 (fax)
dblecher@math.uh.edu <http://www.math.uh.edu/~dblecher>

EDUCATION

1985-1988 Ph.D, University of Edinburgh, Scotland
1984-1985 Mathematical Tripos (roughly equiv. to MSc), Cambridge University, England
1980-1983 B.Sc.(Hons), University of the Witwatersrand

MISCELLANY

Research Area Functional analysis, operator algebras, operator theory
Nationality USA (Born in Britain)
Awards University of Houston Award for Excellence in Research and Scholarship (1996)

ACADEMIC POSITIONS

2000- Professor, University of Houston, Department of Mathematics
1995-2000 Associate Professor, University of Houston
1999 Visiting Professor, Institut Henri Poincare, Paris (September-October)
1991-1993 Visiting Adj. Asst. Professor/NSF Postdoc, University of California, Berkeley
Spring 1992 Visiting Asst. Professor University of Missouri, Columbia, Missouri
1989-1995 Asst. Professor, University of Houston
1988-1989 Visiting Asst. Professor, University of Houston

Editorial boards

Associate Editor, Journal of Mathematical Analysis and Applications (2008-) Impact factor 1.174 (2012). 5-year impact factor 1.345.

Editor, Houston Journal of Mathematics (2010-)

RESEARCH GRANTS

- NSF CO-PI (PI Paulsen), GPOTS 2011 and 2012, DMS1101654, \$25K, 2011-2013
- NSF PI, Noncommutative functional analysis, operator algebras, and operator spaces, DMS 0800674, \$80K, 2008-2011 (Support period extended for additional period)
- NSF PI, Structure in operator spaces and algebras, DMS 0400731, \$117,246, 2004-2007 (Support extended to 2008)
- NSF Co-PI with Paulsen, Papadakis, Operator algebras, operator spaces, frames and applications, \$174,000, 2000-2003 (Support extended to 2004)
- NSF Coinvestigator, PI's Canic and Dean, Research Experiences for Undergraduates, Topics in Geometry, Analysis, Number Theory and Numerical Analysis, \$60,000, 2000-2002
- NSF Co-PI with Paulsen, Operator algebras, modules and completely bounded maps, \$214,000, 1997-2000
- NSF Co-PI with Paulsen, Operator algebras and reproducing kernel Hilbert spaces, \$145,000, 1994-1997
- NSF Co-PI with Paulsen, Operator algebras and reproducing kernel Hilbert spaces, \$82,785, 1991-1993
- NSF Supported as postdoc, PI Paulsen, Operator algebras, \$82,785, 1991-1993
Department of Mathematics Minigrants (under \$10K): 2006, 2008.

BOOKS

1. OPERATOR ALGEBRAS AND THEIR MODULES - AN OPERATOR SPACE APPROACH, (with C. Le Merdy), Oxford University Press (2004)
2. CATEGORIES OF OPERATOR MODULES - MORITA EQUIVALENCE AND PROJECTIVE MODULES, (with P. S. Muhly and V. I. Paulsen). *Memoirs Amer. Math. Soc.* 681 (2000)
3. THE CALCULUS OF ONE-SIDED M -IDEALS AND MULTIPLIERS IN OPERATOR SPACES, (with V. Zarikian), *Memoirs Amer. Math. Soc.* 842 (2006).

CONFERENCE PROCEEDINGS¹

4. SOME APPLICATIONS OF A RECENT CHARACTERIZATION OF OPERATOR ALGEBRAS, In "Selfadjoint and Nonselfadjoint Operator Algebras and Operator Theory", *Contemp. Math.* 120 AMS (1991)
5. GENERALIZING GROTHENDIECK'S PROGRAM, In "Function Spaces", *Lecture Notes in Pure and Applied Math.* 136, Marcel Dekker (1992)
6. SOME GENERAL THEORY OF OPERATOR ALGEBRAS AND THEIR MODULES, In "Operator Algebras and Applications", *Nato ASI Series C*, 495, Kluwer (1997).
7. COMPLETE ISOMETRIES - AN ILLUSTRATION OF NONCOMMUTATIVE FUNCTIONAL ANALYSIS, (with D. Hay) *Proceedings of 4th Conference on Function Spaces*, *Contemp. Math.* 328, Amer. Math. Soc. (2003)
8. ARE OPERATOR ALGEBRAS BANACH ALGEBRAS? In *Banach Algebras and Their Applications*, *Contemp. Math.* 363, Amer. Math. Soc. (2004)

¹All but one of these was a refereed proceedings

REFEREED JOURNAL ARTICLES

9. GEOMETRY OF THE TENSOR PRODUCT OF C^* -ALGEBRAS, *Mathematical Proceedings of the Cambridge Philosophical Society* **104** (1988), 119-127.
10. TRACIALLY COMPLETELY BOUNDED MULTILINEAR MAPS ON C^* -ALGEBRAS, *Journal of the London Mathematical Society* (2) **39** (1989), 514-524.
11. A CHARACTERIZATION OF OPERATOR ALGEBRAS (with Z-J. Ruan and A. M. Sinclair), *Journal of Functional Analysis* **89** (1990), 288-301.
12. INVARIANT SUBSPACES OF AN OPERATOR ON $L^2(T)$ COMPOSED OF A MULTIPLICATION AND A TRANSLATION (with A. M. Davie,) *Journal of Operator Theory* **23** (1990), 115-123.
13. TENSOR PRODUCTS WHICH DO NOT PRESERVE OPERATOR ALGEBRAS, *Mathematical Proceedings of the Cambridge Philosophical Society* , **108** (1990), 395-403.
14. COMMUTATIVITY IN OPERATOR ALGEBRAS, *Proceedings of the American Mathematical Society* **109** (1990), 709-715.
15. TENSOR PRODUCTS OF OPERATOR SPACES (with V. I. Paulsen), *Journal of Functional Analysis* **99** (1991), 262-292.
16. EXPLICIT CONSTRUCTION OF UNIVERSAL OPERATOR ALGEBRAS AND APPLICATIONS TO POLYNOMIAL FACTORIZATION (with V. I. Paulsen), *Proceedings of the American Mathematical Society* **112** (1991), 839-850.
17. THE STANDARD DUAL OF AN OPERATOR SPACE, *Pacific Journal of Mathematics* **153** (1992), 15-30.
18. TENSOR PRODUCTS OF OPERATOR SPACES II, *Canadian Journal of Mathematics* **44** (1992), 75-90.
19. THE DUAL OF THE HAAGERUP TENSOR PRODUCT (with R. R. Smith), *Journal of the London Mathematical Society* **45** (1992), 126-144.
20. A COMPLETELY BOUNDED CHARACTERIZATION OF OPERATOR ALGEBRAS, *Math. Annalen* **303** (1995), 227-239.
21. ON QUOTIENTS OF FUNCTION ALGEBRAS, AND OPERATOR ALGEBRA STRUCTURES ON l^p (with C. Le Merdy), *Journal of Operator Theory* **34** (1995), 315-346.
22. A GENERALIZATION OF HILBERT MODULES, *Journal of Functional Analysis* **136** (1996), 365-421.
23. A NEW APPROACH TO C^* -MODULES, *Math Annalen* **307** (1997), 253-290.
24. ON SELF-DUAL HILBERT MODULES, p.65-80 in "Operator algebras and their applications", *Fields Institute Communications* vol. 13, A.M.S (1997).
25. CONTINUOUS FUNCTIONS ON COMPACT GROUPS, *Proceedings of the American Mathematical Society* **125** (1997), 1177-1185.
26. FACTORIZATIONS IN UNIVERSAL OPERATOR SPACES AND ALGEBRAS, *Rocky Mountain Journal of Mathematics* **27** (1997), 151-167.
27. MORITA EQUIVALENCE OF OPERATOR ALGEBRAS AND THEIR C^* -ENVELOPES, (with P. S. Muhly and Q. Na), *Bulletin of the London Mathematical Society* **31** (1999), 581-591.
28. MODULES OVER OPERATOR ALGEBRAS AND THE MAXIMAL C^* -DILATION, *Journal of Functional Analysis*, **169** (1999), 251-288.
29. ON MORITA'S FUNDAMENTAL THEOREM FOR C^* -ALGEBRAS, *Mathematica Scandinavica* **88** (2001), 137-153.

30. A MORITA THEOREM FOR ALGEBRAS OF OPERATORS ON HILBERT SPACE, *Journal of Pure and Applied Algebra* **156** (2001), 153-169.
31. ON FUNCTION AND OPERATOR MODULES, (with C. Le Merdy) *Proceedings of the American Mathematical Society* **129** (2001), 833-844.
32. THE SHILOV BOUNDARY OF AN OPERATOR SPACE AND THE CHARACTERIZATION THEOREMS, *Journal of Functional Analysis* **182** (2001), 280-343.
33. MULTIPLIERS OF OPERATOR SPACES AND THE INJECTIVE ENVELOPE, (with V. I. Paulsen) *Pacific Journal of Math.*, **200** (2001), 1-17.
34. ISOMORPHISMS OF FUNCTION MODULES AND GENERALIZED APPROXIMATION IN MODULUS (with K. Jarosz), *Trans. Amer. Math. Soc.* **354** (2002), 3663-3701.
35. MULTIPLIERS AND DUAL OPERATOR ALGEBRAS, *Journal of Functional Analysis.* **183** (2001), 498-525.
36. ONE-SIDED M-IDEALS AND MULTIPLIERS IN OPERATOR SPACES. I. (With E. G. Effros and V. Zarikian.) *Pacific Journal of Math.*, **206** (2002), 287-319.
37. ONE-SIDED IDEALS AND APPROXIMATE IDENTITIES IN OPERATOR ALGEBRAS, *J. Australian Math. Soc.* **76** (2004), 425-447.
38. THE IDEAL ENVELOPE OF AN OPERATOR ALGEBRA, (with M. Kaneda) *Proc. Amer. Math. Soc.* **132** (2004), 2103-2113.
39. ONE-SIDED PROJECTIONS ON C^* -ALGEBRAS. With Roger Smith and V. Zarikian. *J. of Operator Theory* **51** (2004), 201-220.
40. COMPLETE ISOMETRIES INTO C^* -ALGEBRAS, (with D. Hay), preprint 2002. (The main result is featured in the recent book by Fleming and Jamison "Isometries on Banach spaces", Chapman and Hall/CRC).
41. LOGMODULARITY AND ISOMETRIES OF OPERATOR ALGEBRAS, (with L. E. Labuschagne), *Trans. Amer. Math. Soc.* **355** (2002), 1621-1646.
42. A DOUBLE COMMUTANT THEOREM FOR OPERATOR ALGEBRAS, (with B. Solel) *J. of Operator Theory.* **51** (2004), 435-453.
43. MULTIPLIERS, C^* -MODULES, AND ALGEBRAIC STRUCTURE IN SPACES OF HILBERT SPACE OPERATORS, pp. 85-128 in "Operator Algebras, Quantization, and Noncommutative Geometry: A Centennial Celebration Honoring John von Neumann and Marshall H. Stone" *Contemp. Math.* 365, Amer. Math. Soc., 2004.
44. MULTIPLIER OPERATOR ALGEBRAS AND APPLICATIONS, (with V. Zarikian) *Proceedings of the National Academy of Sciences of the U.S.A.* **101** (2004), 727-731.
45. DUALITY AND OPERATOR ALGEBRAS: AUTOMATIC WEAK* CONTINUITY AND APPLICATIONS, (with B. Magajna) *Journal of Functional Analysis* **224** (2005), 386-407.
46. DUALITY AND OPERATOR ALGEBRAS II: OPERATOR ALGEBRAS AS BANACH ALGEBRAS (with B. Magajna) *Journal of Functional Analysis* **226** (2005), 485-493.
47. ORDERED C^* -MODULES, (with W. Werner) *Proceedings of the London Mathematical Society* **92** (2006), 682-712.
48. CHARACTERIZATIONS OF NONCOMMUTATIVE H^∞ (with L. E. Labuschagne), *Journal of Integral Equations and Operator Theory* **56** (2006), 301-321.
49. A BEURLING THEOREM FOR NONCOMMUTATIVE L^p (with L. E. Labuschagne), *Journal of Operator Theory* **59** (2008), 29-51.

50. HEREDITARY SUBALGEBRAS OF OPERATOR ALGEBRAS, (with D. M. Hay and M. Neal), *Journal of Operator Theory* **59** (2008), 333-357.
51. NONCOMMUTATIVE FUNCTION THEORY AND UNIQUE EXTENSIONS (with L. E. Labuschagne), *Studia Math.* **178** (2007), 177-195.
52. OPEN PARTIAL ISOMETRIES AND POSITIVITY IN OPERATOR SPACES, (with M. Neal), *Studia Math* **182** (2007), 227-262.
53. APPLICATIONS OF THE FUGLEDE-KADISON DETERMINANT: SZEGÖ'S THEOREM AND OUTERS FOR NONCOMMUTATIVE H^p (with L. E. Labuschagne), *Trans. Amer. Math. Soc.* **360** (2008), 6131-6147.
54. VON NEUMANN ALGEBRAIC H^p THEORY (with L. E. Labuschagne), *Function Spaces: Fifth Conference on Function Spaces*, *Contemp. Math.* Vol. 435, Amer. Math. Soc. (2007).
55. ORDERED INVOLUTIVE OPERATOR SPACES (with K. Kirkpatrick, M. Neal, and W. Werner), *Positivity* **11** (2007), 497-510.
56. EXTENSIONS OF OPERATOR ALGEBRAS I AND II, Part I (with M. Royce) in *J. Math. Analysis and Applns* **339** (2008), 1451-1467. A version of II is available on request.
57. MORITA EQUIVALENCE OF DUAL OPERATOR ALGEBRAS, (with U. Kashyap), *J. Pure and Applied Algebra* **212** (2008), 2401-2412.
58. ON A GENERALIZATION OF W^* -MODULES, (with J. Kraus), *Banach Center Publications* **91** (2010), 77-86.
59. A CHARACTERIZATION AND A GENERALIZATION OF W^* -MODULES, (with U. Kashyap), *Trans. Amer. Math. Soc.* **363** (2011), 345-363.
60. NUCLEARITY-RELATED PROPERTIES FOR NONSELFADJOINT ALGEBRAS (with B. Duncan), *J. Operator Theory* **65** (2011), 47-70. *Errata* to this article was published in *J. Operator Theory* **65** (2011), 471-473.
61. METRIC CHARACTERIZATIONS OF ISOMETRIES AND OF UNITAL OPERATOR SPACES AND SYSTEMS, (with Matthew Neal), *Proc. Amer. Math. Soc.* **139** (2011), 985-998.
62. DUAL OPERATOR SYSTEMS, (with B. Magajna), *Bull. London Math. Soc.* **43** (2011), 311-320.
63. IDEALS AND STRUCTURE OF OPERATOR ALGEBRAS, (with M. Almus and S. Sharma) 2009, to appear *J. Operator Theory*.
64. OPERATOR ALGEBRAS WITH CONTRACTIVE APPROXIMATE IDENTITIES, (with Charles Read), *J. Functional Analysis* **261** (2011), 188-217.
65. OPEN PROJECTIONS IN OPERATOR ALGEBRAS I: COMPARISON THEORY, (with Matthew Neal), to appear *Studia Math* (2011).
66. OPEN PROJECTIONS IN OPERATOR ALGEBRAS II: COMPACT PROJECTIONS, (with Matthew Neal), to appear *Studia Math* (2011).
67. METRIC CHARACTERIZATIONS II, (with Matthew Neal), Submitted (2012).

Chapters in books (refereed)

68. Positivity in operator algebras and operator spaces, pp. 27-71 in *Positivity*, Trends in Mathematics series, Birkhauser (2007).

Internet disseminations:

- **Noncommutative functional analysis for undergraduates.**
This can be downloaded from <http://www.math.uh.edu/~dblecher/canisius.pdf>
- **Lectures on operator spaces and duality.** This can be downloaded from <http://www.math.uh.edu/~dblecher/op.pdf>

INVITED PRESENTATIONS/LECTURE SERIES/ETC (1996-2011)

- 2012: Organizing committee GPOTS 2012 (Houston.)
Organizing committee Operator Spaces, Quantum Probability and Applications, Wuhan (China) June 2012.
- 2011: AMS National meeting special session talk, *Operator algebras with contractive approximate identities*, New Orleans (January).
Banach Algebras 2011, August, Waterloo, Ontario (Plenary).
Colloquium, *Matrices and the process of mathematical discovery*, The Citadel (October).
Special session on Operator and Banach algebras, and non-commutative analysis, SAMS/AMS International congress, Port Elizabeth, South Africa (November–December).
SAMS/AMS Satellite meeting on abstract analysis, Pretoria, South Africa (December).
Scientific Committee, SAMS/AMS Satellite meeting on abstract analysis, Pretoria, South Africa (December).
Colloquium, *Noncommutative topology and noncommutative function algebras*, Northwest University Potchefstroom, South Africa
- 2010: Colloquium, *Duality for Spaces of Hilbert Space Operators*, University of Virginia (March).
Seminar, *Noncommutative H_p spaces and von Neumann algebras*, University of Virginia (March).
Seminar, *One-sided ideals and structure of operator algebras*, SUNY Buffalo (April).
Noncommutative function theory and HSA's, Operator Spaces, Noncomm. L_p Spaces and Applns, BIRS, Banff (June-July, 2010)
- 2009: Banach Algebras 2009, Banach Center, Poland (Plenary).
Dual operator algebras and systems, Yorkshire Functional Analysis Group Seminar, Leeds, December.
Unital operator spaces and operator systems: metric characterization and duality, Seminar, Texas A & M University (March).
Analysis seminar, Leeds, U.K. (December).
- 2008: International Advisory Committee, International Conference on Operator Theory (Delhi Univ. India, January)
GPOTS (Great Plains Operator Theory Symposium) University of Cincinnati (June).
West Coast Operator Algebras Seminar, Flagstaff (September) (Plenary).
Graduate student seminar, University of Houston (twice in 2008).
- 2007: GPOTS (Great Plains Operator Theory Symposium) University of Nebraska (Plenary).
CIRM Conference on Operator Spaces, Noncomm. L_p Spaces and Applns, Luminy, France, June (Plenary; also member of Scientific Organizing Committee).
Workshop on operator spaces and quantum groups, Fields Institute.
Operator spaces and operator algebras, Colloquium, North Dakota State University (October).
Banach Algebras 2007, Quebec City, Canada (Plenary).
Operator spaces and group algebras, Banff (August).
Noncommutative function theory, Colloquium, U. Texas at San Antonio (March).
- 2006: *Duality for spaces of Hilbert space operators*, Colloquium, East Carolina University (March).
Fifth Conference on Function Spaces, S. Illinois State University (Plenary).
GPOTS (University of Iowa).

- CARTHAPOS Workshop-Conference on Positivity, Carthage, Tunisia (Plenary).
 International Workshop on Operator Theory and Applications (Seoul, Korea)
 Lecture series, Seoul National University, Korea.
 Recent Advances in Operator Algebras, Rome, Italy (Semi-plenary).
Von Neumann algebraic H^p theory, Linear Analysis Seminar Texas A & M November 2006.
- 2005: Quantum methods in modern analysis, Ottawa (April) (Plenary).
On the necessity of operator space methods, University of California Santa Barbara (May).
 Operator algebras, operator spaces, and noncomm. probability, Besancon France (June) (Plenary).
 West Coast Operator Algebras Seminar, Banff (September) (Plenary).
- 2004: *Automatic weak* continuity and applications*, Seminar, Texas A & M University (July).
Dual operator algebras: what they are, Seminar, Texas A & M University (September).
 GPOTS (Texas A & M University) (Plenary).
 REU lecture series “New Mathematical Topographies”, Canisius College, September 2004.
Noncommutative linear analysis, Public lecture, Canisius College, Buffalo (September).
Automatic weak continuity and applications*, Seminar, SUNY Buffalo (September).
- 2003: AMS Special session, January (Baltimore).
Algebraic structure in spaces of Hilbert space operators, Colloquium, Rice University (January).
 GPOTS (Univ. of Illinois) (Semi-plenary).
 CIRM Conference on Operator Spaces, Luminy, France (June) (Plenary).
 Ecole d’Ete (Summer School) Univ. Paris VI, Jussieu, Lecture course for European grad. students.
Structure in operator spaces, Functional analysis seminar, University of Illinois (November).
- 2002: Workshop ‘Non-commutative Banach spaces’ Muenster, Germany (Lecture series)
 4th Conference on function spaces, S. Illinois State, May (45 minute talk).
 GPOTS (UNC Charlotte) (May).
 Workshop on Nonself-adjoint Operator Algebras, Fields Institute Toronto (Plenary).
 Operator Space Workshop (College Station, July) (Plenary).
 Regional Functional Analysis conference (College Station, July) (Plenary).
 Non-commutative phenomena and random matrices (August) PIMS (Vancouver).
 Journees du Groupement de Recherche Conference, Besancon, France (September) (Plenary).
The double commutant theorem and generators, Seminar, Texas A & M University (October).
On the general theory of operator algebras, Seminar, University of Texas, Austin (December).
- 2001: Noncommutative Banach space workshop, M.S.R.I. Berkeley (Plenary).
 GPOTS (New Hampshire).
 AMS Special session (Irvine).
Operator spaces and applications, Colloquium, University of South Africa (December).
- 2000: Conference on Operator Spaces (Institut Henri Poincare, Paris). (50 minute talk).
 Operator function theory and semigroups, (45 minute talk). (Ambleside, U. K., September).
 A.M.S. Regional Meeting, Birmingham Alabama (November).
 Annual Informal Analysis Seminar (Kent State University, Ohio) (Plenary).
A generalization of Functional Analysis. Colloquium, University of Houston (February).
Adjointable maps on operator spaces, Seminar, Texas A & M University (July).
Noncommutative M -structure, Seminar, Texas A & M University (August).
A ‘generalization of functional analysis, Colloquium, Washington University, St. Louis (October).
Multipliers and noncommutative M -structure, Seminar, Washington University, St. Louis (October).
- 1999: AMS January meeting (San Antonio)
 Operator Space Workshop (Urbana, March) (Plenary).
 AMS Special Meeting (Urbana, March).
 Canadian Operator Symposium, P. E. I., May (Plenary)

Joint Analysis Seminar, Pretoria (July).

Regional Functional Analysis conference (College Station, July-Aug (Plenary)

Semester on free probability and operator spaces, Institut Henri Poincare, Paris (September).

Noncommutative Functional Analysis and Noncommutative Spaces. Texas A & M University (May).

The Shilov boundary of an operator space. Univ. de Franche-Comte, Besancon, France (September).

Hilbert C^ -modules as the boundary of an operator space*. Inst. Henri Poincare, Paris (September).

1998: Conference on Operator Spaces, CNRS, Luminy, France. On Scientific Organizing Committee.

Summer Workshop in Linear Analysis (Texas A&M).

The maximal C^ -dilation and Morita equivalence*, Seminar, SUNY Buffalo (November).

1997: AMS January meeting (San Diego)

Functional Analysis Meeting (U.N.C. Charlotte) (Plenary)

Great Plains Operator Theory Seminar/Canadian Operator Symposium, Kingston, ON (May)

Joint Meeting of A.M.S. and South African Math Soc. (June, Pretoria, South Africa).

Coorganizer of special session on Functional Analysis and Operators, at AMS/SAMS meeting.

Operator Spaces Workshop (August, Texas A&M) (1 hour speaker).

Operator algebras and their equivalence, Seminar, University of Texas at San Antonio (February).

On C^ -modules*, Colloquium, Oakland University, Michigan (March).

Characterizations of Operator Algebras. Colloquium, University of Houston.

An introduction to operator spaces. Lecture series, University of Pretoria, S. Africa (July).

Advances in Operator Algebra. Colloquium, Texas Christian University (October).

1996: AMS January meeting (Orlando)

South Eastern Analysis Meeting 12, Richmond, Virginia

Canadian Operator Symposium, Saskatoon, May 16-21 (Plenary)

2nd Intl. Conference in Africa on Abstract Analysis, Kruger National Park, Africa (Plenary)

Operator Algebras and Quantum Field Theory, Rome, Italy (July 1-6) (1 hour invited talk)

Aegean Conference on Operator Theory and Applications (Samos, Greece) (Plenary)

Operator Algebras. Colloquium; Brown University, Rhode Island (April).

Hilbert C^ -modules and operator spaces*. Colloquium, University of Pretoria (S. Africa).

Advances in operator spaces. Colloquium, University of Cape Town (S. Africa).

Colloquium, University of the Witwatersrand (S. Africa).

Hilbert C^ -modules and operator spaces*. Seminar, University of Leipzig (Germany).

Operator algebras. Seminar, University of Kiel (Germany).

Operator spaces and Operator Algebras. Seminar, University of Saarbruecken (Germany).

On Operator Modules. Texas A & M University Seminar (November).

GRADUATE RESEARCH DIRECTED

Damon Hay (Ph.D, May 2006, now a tenure track Asst. Prof. at Sam Houston State University)

Upasana Kashyap (Ph.D, December 2008, now a tenure track Asst. Prof. at The Citadel)

Sonia Sharma (Ph.D, December 2009, now a tenure track Asst. Prof. at SUNY Cortland)

Melihat Almus (Ph.D, April 2011), Departmental Lecturer.

H. Chiang, M. Royce. Partly advised M. Kaneda (Ph.D 2003)

Many Masters projects supervised.

UNDERGRADUATE RESEARCH DIRECTED

- Seth Hain, 'Algebra and matrix normed spaces', Rose-Hulman Undergrad. Math. J. **2** (2) (2001). Seth is now a grad student in Minnesota.

- Kay Kirkpatrick, ‘Shilov boundary and M-structure of operator spaces’. Note: A few months after this REU summer project, Kay was co-winner of the Alice T. Schafer Prize for Excellence in Mathematics by an Undergraduate Woman, given by the Association for Women in Mathematics. Kay, now at UC Berkeley, is writing a joint paper growing out of this material.
- REU series “New Mathematical Topographies”, a week-long course of undergraduate lectures and projects on Research in Mathematics, Canisius College, Buffalo, September 2004. The aim of the series is to introduce undergraduate math majors to new research-level mathematics.
- *External Examiner*, Senior Honours thesis, Elena Caffarelli, Canisius College, Buffalo (2010).
- REU projects with Sepehr Morajev, Grant Getselmann 2011.

EXAMPLES OF PROFESSIONAL SERVICE (LAST FIVE YEARS)

- Ad Hoc committee on Undergraduate Curriculum (2012).
- Departmental Graduate Studies Committee 2011–...
- Functional analysis seminar organizer, Fall 2011.
- Organizing committee GPOTS 2012 (Houston.)
- Scientific committee Operator Spaces, Quantum Probability and Applications, Wuhan (China) June 2012.
- Special session organizer, SAMS/AMS International congress, Port Elizabeth, South Africa (November–December 2011).
- Scientific Committee, SAMS/AMS Sattelite meeting on abstract analysis, Pretoria, South Africa (December).
- Coorganizer, SAMS/AMS Satellite meeting on abstract analysis, Pretoria, South Africa (December).
- Promotion and tenure committee 2010.
- Editor, Houston Journal of Mathematics, 2010-
- Departmental Teaching Effectiveness Committee 2010
- PALS program volunteer, UH, 2009–2010.
- Departmental Graduate Studies Committee 2009–2011.
- Scientific Organizing Committee, CNRS Conference on Noncommutative L_p -spaces, operator spaces and applications, Luminy, France (2009)
- Editor, Journal of Mathematical Analysis and Applications (2008-) Impact factor 1.225 (2009)
- Promotion and tenure committee 2007-2008?
- International Advisory Committee, International Conference on Operator Theory (Delhi Univ. India, 2008)
- Scientific Organizing Committee, CNRS Conference on Noncommutative L_p -spaces, operator spaces and applications, Luminy, France (2007)
- College Policy committee 2006-2009
- Faculty Senator (2000-2006)
- Frequent organizer of Functional Analysis Seminar

- National Science Foundation panelist
- Referee for dozens of journals, grant awarding agencies, etc.
- Referee for (full) Professor search, Finland 2006.
- Faculty Affairs Committee (2000-2006)
- Executive Committee (2004-2005)
- Faculty Senate Taskforce member: Principles of progress (2004)
- Faculty Development Leave Committee (2004)
- Post-tenure and Merit Review Committee (2003)
- Scientific Organizing Committee, CNRS Conference on Operator Spaces, Luminy, France (2003)
- University Academic honesty policy task force (2001)
- Post-tenure and Merit Review Committee (2001)
- Departmental Search Committee (2001)
- Departmental Committee on the analysis sequence, Chair (2001-2002)
- Co-ran Research Experiences for Undergraduates program (Summer 2001)
- Graduate studies committee (2000-2002)
- Undergraduate studies committee (2000-2002)
- Departmental Bylaws Committee (2000-2001)
- University of Houston Faculty/Staff Traffic Court (2000-2002)
- Chief Justice, Faculty/Staff Traffic Court (2000-2002)
- University of Houston Transportation and Parking Advisory Committee (2000-2002)