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| **BIOGRAPHICAL SKETCH** | |
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| NAME | POSITION TITLE |
| Kevin L. Behar | Associate Professor |
| EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training).* | |

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| INSTITUTION AND LOCATION | DEGREE  *(if applicable)* | YEAR(s) | FIELD OF STUDY |
| University of Iowa, Iowa City, IA  Yale University, New Haven, CT  Yale University, New Haven, CT  Yale University, New Haven, CT | B.S.  M. Phil.  Ph.D.  Postdoc | 1979  1985  1985  1985-86 | Biochemistry (honors)  Mol. Biochem/Biophysics  Mol. Biochem/Biophysics  Neurometabolism/NMR |
| RESEARCH AND PROFESSIONAL EXPERIENCE: | | | |

1. **Positions**

1985-86 Postdoctoral Research Associate, Dept. Molecular Biophysics & Biochemistry, Yale Univ.

1986-88 Associate Research Scientist, Dept. Molecular Biophysics and Biochemistry, Yale University.

1989-94 Assistant Professor, Dept. Neurology, Yale University.

1994-2001 Research Scientist, Department of Neurology, Yale University.

1998-present Director, MRRC Neurometabolism Research Laboratory, Yale Magnetic Resonance Center

2001-2006 Research Scientist, Department of Psychiatry, Yale University.

2001-2006 Director, MRS/MRI Core of Yale/NIDDK Mouse Metabolic Phenotyping Center

2006-present Associate Professor, Dept Psychiatry; Director, Animal Spectroscopy & Metabolomics

**B. Selected Publications**

**Behar KL**, den Hollander JA, Stromski ME, Ogino T, Shulman RG, Petroff OAC, Prichard JW (1983). High resolution 1H

nuclear magnetic resonance study of cerebral hypoxia in vivo. Proc. Natl. Acad. Sci. (USA). 80: 4945-4948.

Prichard JW, Alger JA, **Behar KL**, Petroff OAC, Shulman RG (1983) Cerebral metabolic studies in vivo by 13P NMR.

Proc. Natl. Acad. Sci. 80:2748-2751.

Rothman DL, **Behar KL**, Hetherington HP, Petroff OAC, Bendall MR, den Hollander JA, Shulman RG (1985). Proton-

observe carbon-decouple spectroscopic study of glutamate and lactate in the rat brain in vivo. Proc. Natl. Acad. Sci.

(USA). 82: 1633-1637.

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spectroscopy of the rat brain in vivo. Proc. Natl. Acad. Sci. (USA). 81: 6330-6334.

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encephalopathy upon amino acids, high energy phosphates, and pHi in the rat brain in vivo: detection through sequential

1H and 31P NMR spectroscopy. J. Neurochem. 44: 1045-1055.

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spectroscopy in status epilepticus. Ann Neurol. 16:169-177.

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nuclear magnetic resonance spectroscopy. Neurol. 35: 781-788.

**Behar KL**, Petroff OAC, Prichard JW, Alger JR, Shulman RG (1986). Detection of metabolites in rabbit brain by 13C NMR

spectroscopy following administration of [1-13C]glucose. Magn. Reson. Med. 3: 911-920.

**Behar KL**, Rothman DL, Hossmann K-A (1989). NMR sectroscopic investigation of the recovery of energy and acid-base

homeostasis in the cat brain after prolonged ischemia. J. Cereb. Blood Flow Metab. 9: 655-665.

Fitzpatrick SM, Hetherington HP, **Behar KL**, Shulman RG (1989). Effects of acute hyperammonemia on cerebral amino

acid metabolism and pHi in vivo, measured by 1H and 31P NMR. J. Neurochem. 52: 741-749.

Fitzpatrick SM, Hetherington HP, **Behar KL**, Shulman RG (1990). The flux from glucose to glutamate in the rat brain in vivo

as determined by 1H-observed, 13C-edited NMR spectroscopy. J. Cereb. Blood Flow Metab. 10: 170-179.

**Behar KL**, Ogino T (1991). Assignment of resonances in the rat brain by two-dimesional shift correlated and J-resolved

NMR spectroscopy. J. Magn. Reson. Med. 17: 285-303.

Mason GF, **Behar KL**, Rothman DL, Shulman RG (1992). NMR determination of intracerebral glucose concentration and

transport kinetics in rat brain. J. Cereb. Blood Flow Metab. 12: 448-455.

Mason GF, Rothman DL, **Behar KL**, Shulman RG (1992). NMR determination of the TCA cycle rate and α-ketoglutarate/

glutamate exchange rate in rat brain. J Cereb. Blood Flow Metab 12: 434-447.

Rothman DL, Petroff OAC, **Behar KL**, Mattson RH (1993) Localized 1H NMR measurements of GABA in human brain in

vivo. Proc. Natl. Acad. Sci. USA, 90: 5662-5666.

**Behar KL**, Ogino T (1993) Characterization of macromolecule resonances in the 1H NMR spectrum of rat brain. Magn.

Reson. Med., 30: 38-44.

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during fore-paw stimulation. J. Cereb. Blood Flow Metab., 14:649-655.

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human brain. Magn. Reson. Med., 32:294-302.

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of the TCA cycle, glucose utilization, α-ketoglutarate/glutamate exchange, and glutamine synthesis in human brain by

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cerebral cortex of hamsters with creutzfeldt-jakob disease. Magn. Reson. Imag. 16: 963-968.

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metabolism and glutamatergic neuronal activity. Proc. Natl. Acad. Sci. 95:316-321.

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## Mason GF, Behar KL, Krystal JH, Rothman DL (2001) Aplicações da ressonância magnética para a medidas espectróscpicos da neurotransmissão (review), Rev. Bras. Psiquiatr. 23 (Supl 1):6-10.

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