BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors.
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NAME Ronald Lee Hamilton	POSITION TITLE Associate Professor of Pathology (Neuropathology);
eRA COMMONS USER NAME rlhamilton	

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
University of Nebraska-Lincoln	BS	1985	Psychology
University of Nebraska Medical Center	MD	1989	Medicine
Univ. of California Medical Center, San Diego	Resident	1989-93	Pathology
Univ. of California Medical Center, San Diego	Fellow	1993-94	Neuropathology
University of Pittsburgh, Pittsburgh, Pennsylvania	Fellow	1994-95	Neuropathology

Please refer to the application instructions in order to complete sections A, B, and C of the Biographical Sketch.

A. Positions and Honors.

Positions and Employment

1995-present Assistant Professor of Pathology (Neuropathology), Univ. of Pittsburgh Sch of Medicine, Pittsburgh, PA
1995-present Assistant Professor of Pathology (Neuropathology), Children's Hospital of Pittsburgh, PA
1995-present Director, Neuropathology Autopsy Brain Bank
1996-present Head, Neurohistology Research Laboratory
1996-present Case Editor, Brain Pathology (International Society of Neuropathology)
2001-present Associate Director, Division of Neuropathology, UPMC-Presbyterian Hospital, Pittsburgh, PA
2003 –present Associate Professor of Pathology (Neuropathology), University of Pittsburgh School of Medicine
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Other Experience and Professional Memberships

1992-1998 American Association for the Advancement of Science
1993-present American Association of Neuropathology
1993-present International Society of Neuropathology
1994-1998 College of American Pathologists (CAP)
1995-97 CAP Neuropathology Subcommittee
1998-present Children's Cancer Group, Study Committee for CCGB975
1999-present Society for Neuroscience

Honors none

Selected peer-reviewed publications (in chronological order).

(Publications selected from 98 peer-reviewed publications)

1. Pollack IF, Finkelstein SD, Woods J, Burnham J, Holmes EJ, **Hamilton RL**, Yates AJ, Boyett JM, Finlay J, Sposto R, and CCG. TP53 Mutations, Expression of p53 and Prognosis in Children with Malignant Gliomas. New England Journal of Medicine 346:420-427, 2002
2. Northcott P, Nakahara Y, Peacock J, Ellison D, Croul S, Feuk L, Ra YS, Kongham P, Zilerberg K, Mack S, McLeod J, Scherer S, Rao S, Grajkowska W, Gillespie Y, Lach B, Grundy R, Pollack IF, **Hamilton RL,** Van Meter T, Carlotti C, Boop R, Bigner D, Gilbertson R, Rutka J, Taylor MD. Multiple recurrent genetic events converge on control of histone lysine methylation in medulloblastoma. Nature Genetics 2009 (epub ahead of print)
3. Boada FE, Tanase C, Davis D, Walter K, Torres-Trejo A, Couce M, **Hamilton R**, Kondziolka D, Bartinski W, Lieberman F. Non-invasive assessment of tumor proliferation using triple quantum filtered 23/Na MRI: technical challenges and solutions. Conf Proc IEEE Eng Med Biol Sci Soc. 2004; 7:5238-41.
4. Witham TF, Okada H, Fellows W, **Hamilton RL**, Flickinger JC, Chambers WH, Pollack IF, Watkins SC, Kondziolka D. The characterization of tumor apoptosis after experimental radiosurgery. Stereotact Funct Neurosurg 83:17-24 2005 (epub)
5. Hatano M, Eguchi J, Tatsumi T, Kuwashima N, Dusak JE, Kinch MS, Pollack IF, **Hamilton RL**, Storkus WJ, Okada H. EphA2 as a glioma-associated antigen: a novel target for glioma-vaccines. Neoplasia 7:717-722, 2005
6. Pollack IF, **Hamilton RL**, Sobol R, Burnham J, Yates AJ, Holmes EJ, Zhou T, Finlay J (for Children Oncology Group).O6-methylguanine-DNA methyltransferase strongly Correlates with Outcome in Childhood Malignant Gliomas: Results from the CCG-945 Cohort J Clin Oncol. Jul 20;24(21):3431-7, 2006.
7. Pollack IF, **Hamilton RL**, James CD, Finkelstein SD, Burnham J, Yates AJ, Holmes EJ, Zhou T, Finlay J (for Children Oncology Group). Rarity of *PTEN* Deletions and *EGFR* Amplification in Malignant Gliomas of Childhood: Results from the Children's Cancer Group-945 Cohort J Neurosurg 105(5 Suppl):418-424, 2006.
8. Okada H, Lieberman FS, Walter KA, Lunsford LD, Kondziolka DS, Bejjani GK, **Hamilton RL**, Torres-Trejo A, Kalinski P, Cai Q, Mabold JL, Edington HD, Butterfield LH, Whiteside TL, Potter DM, Schold SC Jr., Pollack IF Autologous glioma cell vaccine admixed with interleukin-4 gene transfected fibroblasts in the treatment of patients with malignant gliomas. J Transl Med 5:67 (epub ahead of print), 2007.
9. Okada H, Low KL, Kohanbash G, McDonald HA, **Hamilton RL**, Pollack IF. Expression of glioma-associated antigens in pediatric brain stem and non-brain stem gliomas. J Neurooncol 88:245-50, 2008
10. Park DM, Yeaney GA, **Hamilton RL**, Mabold J, Urban N, Appleman L, Flickinger J, Lieberman F, Mintz A. Glioblastoma multiforme in patients with Muir-Torre syndrome. (in press Neurooncology 9/2008)

C. Research Support

Ongoing Research Support

National Institutes of Health 3/30/85 – 3/31/10 8%
P50 AG05133-21 (PI: Lopez) $95,454
Alzheimer Disease Research Center, Core C: Neuropathology
The major goal of the Alzheimer's Disease Research Center (ADRC) is to integrate, coordinate and support and foster research in Alzheimer Disease (AD) and aging. The three objectives of the Neuropathology Core are to (1) procure and bank brain from autopsies of ADRC patients and controls, (2) perform detailed neuropathologic analysis of all AD cases and (3) maintain well catalogued brain bank.

U10 CA13539-27 (Reaman (subcontract 6172) (Pollack) 1/1/06-12/30/09 5%
NIH/NCI $52,000
Children's Oncology Group Brain Tumor Resource Laboratory
This contract is providing infrastructure support for maintaining tissue processing and banking of high-grade gliomas. There is no overlap with the current proposal. This subcontract ends before the start of the current proposal, and if the current proposal is funded, percent effort would be redistributed accordingly.

National Institutes of Health 9/1/98-3/31/10 5%
R01 NS037704-06 (PI: Pollack) $6,362
Molecular Markers as Predictors of Outcome in Gliomas
The major goal of this project is to further characterize the molecular features of tumorigenesis in pediatric malignant gliomas..

National Institutes of Health 7/1/02-5/31/13 10%
P01 NS37704 (PI: Pollack) $15,790

Novel Strategies for Brain Tumor Therapy
The unifying hypothesis of this program project grant is that novel therapeutic approaches that take into account the unique features of central nervous system (CNS) tumors will have utility for preventing tumor growth and inducing tumor regression, and will potentiate the effects of conventional treatment approaches, particularly radiotherapy, for inducing glioma cell killing.

National Institutes of Health 4/1/04 – 3/31/10 5% (No salary support)
U01 CA81453 (PI: Pollack)
Pediatric Brain Tumor Clinical Trials Consortium: Novel Treatment Approaches for Pediatric Brain Tumors
This proposal details the extensive neuro-oncology resources available at the University of Pittsburgh Medical Center, University of Pittsburgh Cancer Institute and Children's Hospital of Pittsburgh and indicates ways in which these activities can be integrated into ongoing clinical trials conducted by the Pediatric Brain Tumor Consortium.

National Institutes of Health 12/1/04 – 11/30/09 5%
R01 MH47346 (PI: Zubenko) $8,017
Morphologic/Neurochemical Correlates of Depression in AD
The major goal of this project is to better define the biological substrates of major depression in AD, with the intention of augmenting the knowledge base that will facilitate the development of more effective treatments, and to provide additional insight into the clinical biology of major depressive disorders affecting the elderly.

NIH/NIMH 12/1/04 –11/30/10 3%
new R01 (PI: Butters) 8,680
Pathways Linking Late Life Depression to Mild Cognitive Impairment and Dementia
The goal of this project is to investigate the relationships among late-life depression (LLD), cognitive impairment and progressive neurodegeneration. The guiding hypothesis is that LLD patients develop cognitive impairments as a consequence of distinct underlying depression-associated neuropathological changes, which frequently are expressed as a non-amnestic form of Mild Cognitive Impairment (MCI).

Brain Tumor Society 07/01/07-05/31/9 5%
PI: Ian Pollack
JPA & Pediatric Low Grade Astrocytoma
DC/IC for Budget Period: $ 14,847 No Indirects
DC/IC for Project Period: $29,694 No Indirects
OVERLAP: NONE

Completed Research Support

Completed:

NPF/Scaife Fnd Seed Money grant; University of Pittsburgh 4/1/00-3/31/0)
(PI: Hamilton)
Alpha-Synuclein Aggregation in Dementia with Lewy Bodies
The major goals of this project are: 1) to characterize Lewy threads (LT) in brain tissue sections to determine their cellular localization and composition; 2) to investigate the role proteases play in the degradation of native and aggregated Alpha-synuclein; 3) to investigate whether ADLB is characterized by relative sequestration of normal Alpha-synuclein into insoluble aggregates, while Alzheimer Disease cases show increased levels of soluble Alpha-synuclein compared to both ADLB and controls.

National Institutes of Health 3/1/02 – 2/28/05 10%
P30 MH52247-10 (PI: Reynolds) $23,305
Intervention Research Center for the Study of Late-Life Mood Disorders

a supplement to the above grant to establish a brain bank to investigate the neuropathological substrate of late life mood disorders.

National Institutes of Health 09/30/03 – 07/31/08 5%
R01 NS048595 (PI: Montine) $75,000
Subcontract to the University of Washington on grant "Characterization of DLB: a Collaborative Study"
The major goal of this multi-institutional project is to investigate the role of ApoE4 alleles and other genetic polymorphisms in the Lewy Body Variant of Alzheimer's Disease