

BIOGRAPHICAL SKETCH

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NAME David M. Center, M.D.	POSITION TITLE Associate Provost for Translational Research Gordon and Ruth Snider Prof. of Pulmonary Medicine, Chief, Allergy, Pulmonary and Critical Care Medicine, Boston University Medical Campus
eRA COMMONS USER NAME DCENTER	

EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Boston University School of Medicine	A.B., M.D.	1972	Medicine
Boston University Medical Center	Resident	1972-74	Medicine
Boston University Medical Center	Fellow	1974-75	Pulmonary Medicine
Robert B. & Peter B. Brigham Hospital/	Research Fellow	1975-78	Immunology/Allergy
Harvard Medical School	(K. Frank Austen)	1975-78	

A. Personal Statement. David Center has been the PI of NIH funded research since 1978. He is the co-discoverer of Interleukin-16 and has published over 150 articles and reviews on the subject. His current work is divided between studies on the role of Pro-IL-16 as a nuclear scaffold for transcriptional regulators in T cells and the development of therapeutics derived from the secreted cytokine Interleukin 16. His recent positions as PI of Boston University's CTSA and Associate Provost for Translational Research have permitted him to expand from his own T1/T2 type research to facilitate all stages of Translation Research for scientists at Boston University.

B. Positions and Honors

Hospital and Academic Appointments:

1978-1983	Assistant Professor of Medicine, Boston University School of Medicine, Chief, Allergy Unit
1983	Associate Professor of Medicine, Boston University School of Medicine
1987	Chief, Pulmonary, Allergy and Critical Care Medicine, Boston University School of Medicine
1989	Professor of Medicine and Research Professor of Biochemistry
2000	Gordon and Ruth Snider Professor of Pulmonary Medicine
2006	Asst Provost for Translational Research; Director, Clinical and Translational Science Institute
2007	Associate Provost for Translational Research

Specialty Board Certification:

1975	Internal Medicine
1977	Allergy/Immunology
1980	Pulmonary Medicine

Selected Honors and Committee Service (of over 100):

1985-1990	Career Investigator of the American Lung Association
1987-1988	National Secretary/Treasurer, A.F.C.R
1987-1990	Respiration Study Section, Veteran's Administration Merit Review
1989	Co-Chairperson, Fellowship Fellow Review Committee, Amer.Lung Assoc.
1989	Elected, American Society for Clinical Investigation
1990-1994	NIH Lung Biology Pathology Study Section; Chairman, 1992-94
1992-1995	Chairman, American Lung Association Research Grant Review Committee
1995-1996	NIH DRG Advisory Council
1996-2000	NIH Peer Review Oversight Group (PROG) Charter Member
1999-2003	Chair, American Thoracic Society Publications Policy Committee
1999-2006	NHLBI Board of Extramural Advisors
1999	Elected, Association of American Physicians

2002 Distinguished Alumnus, Boston University School of Medicine
 2005- NHLBI T32 Study Section
 2007- Reviewer, NHLBI LRP Applications
 2007- University Research Council
 2008- Chair, University Translational Science Committee
 2008- Reviewer, NIH Pioneer Awards

C. Selected Publications (from over 150 total)

1. Kornfeld, H., Cruikshank, W.W., Pyle, S.W., Berman, J.S., Center, D.M. Lymphocyte Activation by HIV-1 Envelope Glycoprotein. *Nature* 335:445-448, 1988.
2. Cruikshank, WW, Center, DM, Nisar, N, Natke, B, Theodore, AC, Kornfeld, H. Molecular And Functional Analysis Of A Lymphocyte Chemoattractant Factor: Association of Biologic Function with CD4 Expression. *PNAS* 91:5109-5113, 94.
3. Cruikshank, W., Kornfeld H, Berman J., Chupp G., Keane J., Center D. Biology of IL-16. *Nature* 382:501-02, 1996.
4. Mackiewicz C, Levy J, Cruikshank W, Kornfeld H, Center D HIV-1 inhibitory activity of IL-16. *Nature* 383:488 1996.
5. Maciaszek, J. W., Parada, N.A., Cruikshank, W.W., Center, D.M., Kornfeld, H., Viglianti, G.A. Interleukin-16 Represses HIV-1 Promoter Activity. *J. Immunol.* 158:5-8, 1997.
6. Viglianti, G.A., Parada, N.A., Maciaszek, J. W., Kornfeld, H., Center, D.M., Cruikshank, W.W. IL-16 anti-HIV-1 therapy. *Nature Medicine* 3:938, 1997.
7. Parada, N.A., Cruikshank, W.W., Kornfeld, H., Center, D.M. Synergistic Activation of CD4+ T cells by Interleukin 16 and Interleukin 2. *J. Immunol.* 160:2115-2120, 1998.
8. Vallen-Mashikian, M., Ryan, T.C., Seman, A., Brazer, W., Center, D.M., Cruikshank, W.W. Reciprocal desensitization of CCR5 and CD4 is mediated by IL-16 and MIP-1 respectively. *J. Imm.* 163:3123-31, 1999.
9. Little FF, Cruikshank WW, Center DM IL-9 stimulates release of chemotactic factors from human bronchial epithelial cells. *Am J Respir Cell Mol Biol.* 2001 Sep;25(3):347-52.
10. Lynch, EA, Heijens, CA, Horst, NF, DM, Cruikshank, WW. Cutting Edge: IL-16/CD4 preferentially induces Th1 cell migration: requirement of CCR5. *J Immunol.* 2003 Nov 15;171(10):4965-8.
11. Center, DM, Cruikshank, WW, Zhang, YJ. Nuclear Pro-Interleukin-16 Regulation of T cell Proliferation: P27^{KIP1} Dependent G0/G1 Arrest Modulated by Inhibition of Skp2 Transcription. *J. Imm.* 172:1654-60, 2004.
12. Burkart KM, Barton SJ, Holloway JW, Yang IA, Cakebread JA, Cruikshank W, Little F, Jin X, Farrer LA, Clough JB, Keith TP, Holgate S, Center DM, O'Connor GT. Association of asthma with a functional promoter polymorphism in the IL-16 gene. 2006 *J Allergy Clin Immunol.* 117:86-91.
13. Morgan, R, McAllister, B, Cross, L, Green, D, Kornfeld, H, Center, DM, and Cruikshank, WW. 2007 Histamine 4 receptor activation induces recruitment of FoxP3+ T cells and inhibits allergic asthma in a murine model. *J. Immunol* 178(12):8081-9.
14. McFadden, C, S, Green, D, Yamasaki, H, Center, DM, Cruikshank, WW. 2007 Preferential migration of T regulatory cells induced by IL-16. C. McFadden, R. Morgan, S. J. *Immunol.* 179:6439-45
15. Zhang, Y, Tuzova, M., Xiao, Z-XJ., Hanson, SK, Xie, H, Kornfeld, H, Cruikshank, WW, Center, DM. 2008 Pro-Interleukin-16 is a scaffold protein which targets Histone Deacetylase 3 to Transcription Factor GABP in the Skp2 Core Promoter. 2008 *J. Immunol.* 180:402-408. PMID 18097041
16. Green, DS, Center, DM, Cruikshank, WW. 2009 HIV-1 gp120 reprogramming of T cell migration provides a mechanism for lymphadenopathy. *J. Virol.* PMID 19297493.

D. Research Support

Principal Investigator:

R01 AI35680 (Center, PI)

4/15/2005-12/31/2010

NIH/NIAID

Role of Interleukin 16 in Asthma

Grant studies the effects of Interleukin-16 on chemotaxis and induction of Regulatory T cells.

T32 HL 07035 (Center, PI) 7/1975-6/2011

Training grant

Biology of the Lung, A Multidisciplinary Approach

Twelve postdoctoral and six predoctoral positions

UL1 RR025771-01 Boston University Clinical and Translational Science Award (CTSA). D. Center PI. 30% effort. Estimated annual/total costs: ~\$4,600,000/\$23,000,000.

TL1 RR025769-01 Boston University Clinical and Translational Science Award. D. Center P.I. Training component of RR025771.

KL2 RR025770-01 Boston University Clinical and Translational Science Award. D. Center, P.I.

Co-Investigator:

T32 AI Immunology Training Grant. Anne Rothstein, P.I. Six predoctoral; 4 post-doctoral positions.

R01 CA100925-02 PI: Zhang, Yujun Role of Pro-Interleukin 16 in T cell Malignancy@ December 1, 2004-Nov. 30 2009. \$200,000/yr Direct costs. D. Center, Co-investigator, 10%effort.

Corporate Activity:

Scientific Co-Founder, Sedecim Therapeutics, Inc

Scientific Co-Founder and President, Abkine Therapeutics, Inc

Patents:

U.S. PATENTS (from application #1995000581103):

1. 5766866 (6/16/98): "Lymphocyte Chemoattractant Factor and Uses Thereof"
2. 5776502 (7/7/98): "Lymphocyte Chemoattractant Factor and Uses Thereof"
3. 5807549 (9/15/98): "Lymphocyte Chemoattractant Factor and Uses Thereof"
4. 5807712 (9/15/98): "Lymphocyte Chemoattractant Factor and Uses Thereof"
5. 5869263 (2/9/99): "Lymphocyte Chemoattractant Factor and Uses Thereof"
6. 5965120 (10/12/99): "Lymphocyte Chemoattractant Factor and Uses Thereof"
7. 5976522 (11/02/99): "Lymphocyte Chemoattractant Factor and Uses Thereof"
8. 6159463 (12/12/00): "Lymphocyte Chemoattractant Factor and Uses Thereof"
9. 6207144 (3/27/01): "Lymphocyte Chemoattractant Factor and Uses Thereof"
10. 6699466 (3/2/04) "IL-16 antagonist peptides and DNA encoding the peptides"
11. 6723697 (4/20/04) "IL-16 antagonists"

Four provisional filings. Eight European, Canadian and Asian patents. Claims related to synthesis of recombinant IL-16, measurement, uses, and antagonists.

All patents owned by Boston University.
