

Sean C. Ahearn, Ph.D.

Department of Geography Hunter College, The Doctoral Program in Earth and Environmental Sciences, City University of New York; and **Director:** Center for Advanced Research of Spatial Information (CARSI)

a) Professional Preparation

Institution	Major	Degree
Syracuse University/ SUNY-ESF	Natural Research Management	B.S.
University of Wisconsin Madison.	Environmental Remote Sensing	M.S.
University of Wisconsin Madison.	Environmental Remote Sensing	Ph.D.

b) Appointments

Year	Appointment
2002 - present	Professor, Department of Geography Hunter College - CUNY
1994 - present	Director, Center for Advanced Research of Spatial Information

c) Publications (selected)

- Ahearn, S.**, I. Icke, R. Datta, B. Plewe, M. DeMere, A. Skupin. (2013) . “Re-engineering the Geographic Information System Body of Knowledge” Special Issue on GIS-Cyber-Infrastructure. *International Journal for Geographic Information Science* Vol. 27 Issue 11.
- Green, G., **S. Ahearn**, W. Ni-Miester, (2013), "A multi-scale approach to Mapping Canopy Heights", *Photogrammetric Engineering and Remote Sensing*, February 2013 Vol. 79, # 2.
- DeMeres, M., A. Klimaszewski-Patterson, R. Richman, S.C. **Ahearn**, B. Plewe, A. Skupin, (2013) *in press*. "Toward an Immersive 3D Virtual BoK Exploratorium: A Proof of Concept". *Transactions on GIS*.
- Carney, R., **S. Ahearn**, A. McConchie, C. Glaser, C. Jean, C. Barker, B. Park, K. Padgett & V. Kramer. 2011. DYCAST early warning system for West Nile virus". *Journal of Emerging Infectious Disease*, Vo. 17, issue 8.
- Ahearn, S.C.**, Ahn, Y.J. 2011. "Quality Assurance and potential applications of high density LiDAR data for the City of New York" , *Proceedings American Society of Photogrammetry and Remote Sensing*, Milwaukee Wisconsin.
- Ahearn, S. C.**, A., J.L.D. Smith, A. Simchareon, S. Simchareon, and J. Garcia, 2010. “Modeling the relationship between patterns of movement of Panthera tigris and its behavioral states.” Ed. B. Gottfried, P. Laube, A. Klippel, N. Van de Weghe & R. Billen. *Proceedings of the 1st Workshop on Movement Pattern Analysis*, MPA’10, Zurich Switzerland, September 14, 2010. Pg. 143-146.
- Theophilides, C.; **S. C. Ahearn**; E. Binkowski; W. S Paul; and K. Gibbs. 2006. “First Evidence of West Nile virus amplification and relationship to human infections” *International Journal for Geographic Information Science* Vol 20, No. 1, January 2006, 103-115.
- Ahearn, S. C.**; J.L.D. Smith; A. R. Joshi; and J. Ding “TIGMOD: an individual-based spatially explicit model for simulating tiger/human interaction in multiple use forests”. *Ecological Modeling* 140 (2001) 81-97.
- Smith, J.L.D., S.C. **Ahearn**, and C. McDougal. 1998. Landscape analysis of tiger distribution and habitat quality in Nepal . *Conservation Biology* 12:1-9.
- Theophilides, C.; S. C. **Ahearn**; S. Grady; M. Merlino. 2003. “DYCAST: System for Identifying West Nile Virus Risk Areas”. *American Journal of Epidemiology*, Vol. 157, No. 9, 843-854.
- Ding, J., **S. Ahearn**, E. Cooper. 2004. An Incremental Geographic Update System (IGUS) of a Large Geographic Database: New York City. *AGILE*, Heracleon, Greece.

Henderson, D. B., **S. Ahearn**, 1998 .Evolution of a municipal landbase from layers to objects, *URISA Annual Conference Proceedings*, Charlotte, NC.,pp. 320-330

Ahearn, S.C. 1988. "Combining Laplacian images of different spatial frequencies (scales): implications for image analysis. *IEEE Geoscience and Remote Sensing*. vol. 26, issue 6, pp. 826-831.

d) Grants (recent. Total > \$20M since 1995)

1. The National Science Foundation. 2010-13. *PI.* "Geographic Information Science and Technology BoK2: Foundational Research". \$409,000.
2. US Department of Energy. 2010-11. **Co-PI.** "NYC Solar Map", Directed development. \$212,000
3. New York Department of City Services (DCAS). 2010. **PI.** "High Density Lidar acquisition and quality assurance". \$ 450,000.
4. New York City Department of Environmental Protection. **PI.** 2002 – 2012. Quality control for the New York City Sewer GIS Compilation, Funding: ~ \$ 9,000,000
5. New York City Department of Information Technology and Telecommunications. 1996 – 2004. **PI.** Update and Maintenance of the New York City Base-map (NYCMap) Funding: ~\$8,000,000
6. California Department of Health. 2005 -2008. **PI.** DYCAST: A real-time warning system for West Nile Virus. ~ \$ 200,000

e) Synergistic Activities

2008-2011	Appointment by US Secretary of Interior Kempthorne to the National Geospatial Advisory Committee (NGAC) as a <i>founding member</i> (2008- 20011).
2010	<i>Thought Leader</i> of a Ph.D. team to enhance the design of a Geospatial portal for emergency response, called UDOP, for the United States Southern Command.
2010-11	Editorial board of <i>Computers Environment and Urban Systems</i>
2007-2008	President of the University Consortium of Geographic Information Science. February (2007 -2008).
1994- 2004	Pioneered the design, development and maintenance of the New York City Geographic Base Map (NYCMap), the first photogrammetric base-map of New York

f) Awards

1. IBM Faculty Award for 2013
2. Hunter College President’s Award for Excellence in Applied Research May 5, 2003.
3. The Anastasia Van Berkalow Award for Distinguished Service to Geography 2001
4. American Geographical Society, Commendation for meritorious services in the applications of geospatial technologies in response to the World Trade Center Crisis, November 2001.
5. Smallworld (now GE Network Solutions) Innovation Award for 1998, for development of an object-oriented model using Smallworld GIS to model tiger behavior and interaction

h) Presentations & Lectures (select)

- i. Transactions on Geographic Information Science Plenary Speaker. The American Association of Geographers, Tampa, Fl. 2014.
- ii. Presentation. The International Cartography Conference. The GIS & T Body of Knowledge: foundational research. Paris 2011.
- iii. Keynote. International Conference on Geographic Information Science, Istanbul, Turkey, 2008
- iv. Invited Speak, The University of Southern California, October 2007
- v. Invited Speaker, Rutgers University October 2006.
- vi. Keynote. West Virginia Annual Geographic Information Systems Conference; June 2006.
- vii. Invited Speaker, The CIA February 2004.
- viii. Invited Speaker, The NSA, February 2004.
- ix. Invited Speaker, The NGA, February 2004.
- x. Invited speaker, Harvard School of Design 2003