

BIOGRAPHICAL SKETCH

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| NAME Jerry N. Blancato | POSITION TITLE Deputy Director |
| eRA COMMONS USER NAME | |

| 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 |
| Fordham University, Bronx, NY | B.S. | 1967-71 | Chemistry |
| Hahnemann Medical College & Hospital, Philadelphia, PA | M.S. | 1972-77 | Experimental Pathology |
| University of Delaware, Newark, DE | Ph.D. | 1997-1985 | Biomedical Engineering |

A. POSITIONS and HONORS**Research and Professional Experience:**

2005-Present Deputy Director, National Center for Computational Toxicology, ORD, USEPA
2004-2004: Acting Associate Director for Health, NERL, USEPA, RTP, NC (June-December)
2003-2004: Acting Director, Human Exposure & Atmospheric Sciences Division (HEASD), NERL, USEPA
2002-2003: Special Assistant, HEASD, NERL, USEPA, NC
2001-2003: Acting Director, HEASD, NERL, USEPA, NC
1997-2001: Chief, Exposure and Dose Research Branch, HEASD, NERL USEPA
1996-1997: Program Manager, Exposure Research Program, Analytical Science Branch
Environmental Monitoring Sciences Division, NERL USEPA
1989-1995: Research Biologist, Exposure Research Program, Analytical Science Branch,
Environmental Monitoring Sciences Laboratory, USEPA, Las Vegas, NV
1985-1989: Environmental Health Scientist, Exposure Assessment Group, Office of Health & Environmental
Assessment, USEPA, Washington, DC

Professional Societies and Affiliations:

Society for Risk Analysis
Reviewer, Journal of Exposure Science and Environmental Epidemiology
Editorial Board, Journal of Environmental Protection Science

Honors and Awards:

Bronze Medal from ORD for Reducing Uncertainty in Cumulative Risk Assessments for Drinking Water
Disinfection Byproducts by Improving Exposure Estimates.
Bronze Medal from ORD For identifying and piloting improvements enhancing the quality and cost
effectiveness of ORD-wide information management and technology services
Bronze Medal from ORD for Education and Outreach, Bronze Medal from OPP for development of scientific
research program to aid in improved risk assessments; Bronze Medal from ORD for contribution to risk
assessment team for trichloroethylene.

Selected invitations at National & International Symposia:

Invited Speaker at Exposure Session at annual Meeting of the Society of Risk Analysis, Baltimore, Maryland,
December, 2006. Presentation: "PBPK modeling for exposure and dosimetry"

2006 Science Advisory Panel for CIIT of the Hamner Institute for Health Sciences.

Selected Expert Committees/Advisory Panels/Organizing Committees:

ILSI Workgroup on Dose Selection, ILSI Steering Group on Biomarkers, Member of Workgroup on Urban Air Transport Models and Their Standard of the Interagency Steering Committee on Multimedia Environmental Models, Adjunct Faculty, University of North Carolina – Graduate Committees, Adjunct Faculty, University of Nevada-Las Vegas – Graduate Committees and part-time Faculty, Adjunct Faculty, Community College of Southern Nevada.

Selected Assistance/Advisory Support to the Agency:

Co-chair of the ORD IT improvements workgroup (2006-2007), Member of the ORD Science Council since 2004 and ORD Management Council since 2005, Health Effect Committee of the Agency Risk Assessment Forum 2004, 1990 – 1992, Worked on numerous dose metric issues and contributed to several risk assessments for the Agency, Developed ORD training program for OPP and its national and international stake holders and collaborators, August 2004

B. SELECTED PUBLICATIONS (selected from 160 total).

- Rhomberg, Lorenz R., Baetcke, Karl, Blancato, Jerry, Bus, James, Cohen, Samuel, Conolly, Rory, Dixit, Rakesh, Doe, John, Ekelman, Karen, Fenner-Crisp, Penny, Harvey, Paul, Hattis, Dale, Jacobs, Abigail, Jacobson-Kram, David, Lewandowski, Tom, Liteplo, Robert, Pelkonen, Olavi, Rice, Jerry, Somers, Diana, Turturro, Angelo, West, Webster and Olin, Stephen (2007)
Issues in the Design and Interpretation of Chronic Toxicity and Carcinogenicity Studies in Rodents: Approaches to Dose Selection', Critical Reviews in Toxicology, 37:9, 729 – 837, 2007
- Blancato, J.N. Evans, M.V., Power, F.W., Caldwell, J.C.
Development and Use of PBPK Modeling and the Impact of Metabolism on Variability in Dose Metrics for the Risk Assessment of Methyl Tertiary Butyl Ether (MTBE) Journal of Environmental Protection Science, 1: 29 – 51, 2007
- Blancato, J. N., F. W. Power, A. Ruiz, A. Tsang, M. S. Okino, J. C. Johnson, C. C. Dary, N. Heravi, R. N. Brown, And L. S. Sheldon. Exposure Related Dose Estimating Model (Erdem). U.S. Environmental Protection Agency, Washington, Dc, 2007.
- Power, F. W., C. C. Dary, J. B. Knaak, R. Tornero-Velez, And J. N. Blancato. Malathion Exposure During Lice Treatment: Use Of Exposure Related Dose Estimating Model (Erdem) And Factors Relating To The Evaluation Of Risk. U.S. Environmental Protection Agency, Washington, Dc, Epa/600/R-07/023 (Ntis Pb2007-106971), 2007.
- Sohn, M.D., McKone, T.E., Blancato, J.N. "Reconstructing Population Exposure from Dose Biomarkers: Inhalation of Trichloroethylene (TCE) as a Case Study" Journal of Exposure Analysis, 14(3): 204-213, 2004
- Knaak, J.B., Dary, C.C., Power, F., Thompson, C.B., Blancato, J.N "Physicochemical and Biological Data for the Development of Predictive Organophosphorus Pesticide QSARs and BPK/PD Models for Human Risk Assessment" Critical Reviews in Toxicology, 34 (2):143 – 207, 2004.
- Blancato, J.N. Power, F.W., Wilkes, C.R, Tsang, A.M. Hern, S.C. and Olin, SS Integrated Probabilistic and Deterministic Modeling Techniques in Estimating Exposure to Water-borne Contaminants: Part 2: Pharmacokinetic Modeling in Proceedings of Indoor Air 2002 International Conference.
- Hagstrom, B.L., Brown, R.N., Blancato, J.N. "Comparison of Symbolic, Numerical AUCs of Small Linear PBPK Models" in Biomarkers for Agrochemicals and Toxic Substances: Applications and Risk Assessment. No. 643, ACS Books 1996.
- Knaak, J.B., Al-Bayati, M.A., Raabe, O.G., Blancato, J.N. "Use of a Multiple Pathway and Multiroute PBPK Model for Predicting of Toxicity" in Biomarkers for Agrochemicals and Toxic Substances: Applications and Risk Assessment. No. 643, ACS Books 1996.
- Blancato, J.N. "Pharmacokinetics, Chemical Interactions and Toxicological Risk Assessment in Perspective" Environmental Health Perspectives, 102(9):133-137 1994.
- Blancato, J.N. and Saleh, M.A. "Physiologically Based Pharmacokinetic Models: Examples of Their Use in Exposure and Risk Assessment" in Biomarkers of Human Exposure, ACS Symposium Series No. 542, Saleh, M., C. Nauman, and J. Blancato, eds. American Chemical Society 1993.

- Blancato, Jerry and K. Hulebak. "Exposure Assessment as Applied to Risk Characterization: Work Group IV" - Proceedings of the Workshop on General Population Exposure to Gasoline, Annapolis, Maryland, 12-14 December 1990, Journal of Exposure Analysis and Environmental Epidemiology, 2(1):151-153, 1992.
- Knaak, J. B., M. A. Al-Bayati, O.G. Raabe, and J.N. Blancato "Prediction of Anticholinesterase Activity and urinary Metabolites of Isofenphos: Use of Percutaneous Physiologically Based Pharmacokinetic-Physiologically Based Pharmacodynamic Model in Biomarkers of Human Exposure, ACS Symposium Series No. 542, Saleh, M., C. Nauman, and J. Blancato, eds. American Chemical Society 1993.
- Saleh, M.A., C. Wallace, Jr., and J.N. Blancato "Computer-Aided Molecular Modeling for Development of Biomarkers for Human Exposure to Pesticides" in Biomarkers of Human Exposure, ACS Symposium Series No. 542, Saleh, M., C. Nauman, and J. Blancato, eds. American Chemical Society 1993.
- Dary, C.C., J.N. Blancato, M. Castles, V. Reddy, M. Cannon, M.A. Saleh, and G. G. Cash "Dermal Absorption and Disposition of Formulations of Malathion in Sprague-Dawley Rats and Humans" in Biomarkers of Human Exposure, ACS Symposium Series No. 542, Saleh, M., C. Nauman, and J. Blancato, eds. American Chemical Society 1993.
- Abou Zeid, M.M., G. Ebarouty, E. Abdel-Rehein, J.N. Blancato, C. C. Dary, A. El-Kahlik, H. El-Sebae, and M.A. Saleh "Malathion Disposition in Dermal and Orally Treated Rats and its Impact on the Blood Serum Acetylcholine Esterase and Protein Profile" 1993.
- Saleh, M.A. and J.N. Blancato "Gamma Aminobutyric Acid Radioreceptor Assay: A Confirmatory Quantitative Assay for Toxaphene in Environmental and Biological Samples" Cheomosphere 27(10): 1907-1914, 1993.
- Stevens D.K., R.J. Bull, C.H. Nauman, J.N. Blancato. "Decision Model for Biomarkers of Exposure" Regulatory Toxicology and Pharmacology 14(3): 286-296, 1991.
- Bruckner, J., B. Davis, and J.N. Blancato. "Metabolism, Toxicity, and Carcinogenicity of Trichloroethylene." Critical Reviews in Toxicology 20(1):31-50, 1989.
- Chen, C.W. and J.N. Blancato. "Incorporation of Biological Mechanisms in Cancer Risk Assessment: Example--Vinyl Chloride." Cell Biology and Toxicology 5(4):417-444, 1989.
- Blancato, J.N., M.A. Callahan, S.T. Hwang, G. Kew, R.V. Moraski, C.H. Nauman, J.L. Schaum, J.J. Segna, R. Walentowicz and P. White. "Estimating Exposures to 2,3,7,8-TCDD." EPA/600/6-88/005A, March 1988.
- Chen, C.W. and J.N. Blancato. "Role of Pharmacokinetic Modeling in Risk Assessment: Perchloroethylene as an Example." In Pharmacokinetics in Risk Assessment National Academy Press, Washington DC 1987.

INVITED BOOK CHAPTERS (PEER REVIEWED)

- Blancato, J.N. and Vallero, D. Computational Environmental Toxicology in McGraw-Hill Yearbook of Science and Technology, 2006 pp 72-74. McGraw-Hill 2006.
- Blancato, J.N. and N. Chiu "Predictive Modeling for Uptake and Tissue Distribution from Human Exposures" in Safety of Water Disinfection: Balancing Chemical & Microbial Risks, G. Craun, ed. ILSI Press 1993.
- Blancato, J.N. and N. Chiu "Use of Pharmacokinetic Models to Estimate Internal Doses from Exposure" in preparation as chapter in Drinking Water Contamination and Health: Integration of Exposure Assessment, Toxicology, and Risk Assessment R. Whang, ed. Marcel Dekker, Inc. 1993.
- Brown, R., J.N. Blancato, and D. Young "Pharmacokinetic Interactions of Drinking Water Contaminants" in Drinking Water Contamination and Health: Integration of Exposure Assessment, Toxicology, and Risk Assessment R. Whang, ed. Marcel Dekker, Inc. 1993.
- Blancato, J.N. and K.B. Bischoff. "The Application of Pharmacokinetic Models to Predict Target Dose." Book chapter in Health Risk Assessment Through Dermal and Inhalation Exposure and Absorption of Toxicants, CRC Press Inc. c. 1992 527p.

OTHER SELECTED PRESENTATIONS

- Blancato, J.N. "PBPK modeling for exposure and dosimetry" Annual Meeting of Society for Risk Analysis, December, 2006.

Principal Investigator/Program Director (Last, First, Middle): Blancato, Jerry N.

- Blancato, J.N., Power, F.W., Evans, M.V., Okino, M., Dary, C.C. "Using Dose Metrics to Better Identify Relevant Exposures When Assessing Impacts From Exogenous Chemicals" Annual Meeting of the Society of Toxicology, March 2006.
- Power, F.W., Blancato, J.N., Evans, M.V., and Sang, A. "A Physiologically - Based Pharmacokinetic (PBPK) Model For Methyl Tertiary Butyl Ether (Mtbe)" Annual Meeting of the Society of Toxicology, March 2006.
- Okino, M.; Evans, M.V., Power, F.W., Chiu W.A., Lipscomb J.C., Blancato, J.N., Chen, C. "Evaluation Of Multiple Pharmacokinetic Modeling Structures For Trichloroethylene" Annual Meeting of the Society of Toxicology, March 2006.
- Power, F.W., Blancato, J.N., Ruiz, A., Licitra, J. and Ventresca, J. "An Advanced PBPK Model Input System and Data Repository for Complex Models With Export for the ACSL Model Engine" Annual Meeting of the Society of Toxicology, March, 2000.
- Scott, C.S., Blancato, J.N., Power, F.W., Fisher, J.W. "Application and Use of Dose Estimating Exposure Model (DEEM) for Route to Route Dose Comparisons After Exposure to Trichloroethylene (TCE)" Annual Meeting of the Society of Toxicology, March, 2000.
- Blancato, J.N., Power, F.W. and Fisher, J.W. "Application and Use of Dose Estimating Exposure Model (DEEM) for Dose Comparisons After Exposure to Trichloroethylene (TCE)" Annual Meeting of the Society of Toxicology, March, 2000.
- Tseng, A.M., Brown, R.N., Power, F.W., Blancato, J.N., Scott, C.W. "Uncertainty Analysis of TCE Using the Dose Estimating Exposure Model (DEEM) in ACSL" Annual Meeting of the Society of Toxicology, March, 2000.
- Knaak, J.B., Dary, C.G., Patterson, G.T. and Blancato, J.N. "Use of PBPK/PD Models and Foliar Transfer Coefficients in Assessing Reentry into Pesticide Treated Citrus and Turf" Annual Meeting of the Society of Toxicology, March, 2000.