

## EDUCATION

**Postdoctoral Fellow** • Colorado State University in Fort Collins, CO  
Research with Professor A.G.M. Barrett

**Ph.D. Organic Chemistry** • Northwestern University in Evanston, IL  
Research with Professor A.G.M. Barrett

*Thesis title: "Redox Glycosidation via Thionoester Intermediates and The Synthesis of the Lewis X Trisaccharide"*

**M.S. Organic Chemistry** • Northwestern University in Evanston, IL  
Research with Professor A.G.M. Barrett

**B.S. Chemistry** • Illinois Institute of Technology in Chicago, IL  
Graduation with Honors, minor in Biochemistry

## EXPERIENCE

2016 – PRESENT

### Vice President, Chemistry EAG Laboratories

- Operations manager over EAG St. Louis location
- Direct operations through a team of functional managers/front line supervisors
- Manages chemistry, science, laboratory techniques, quality
- Manages cost reduction, on-time delivery, client satisfaction, employee relations
- Evaluates site performance measures
- Evaluates continual process improvement and efficiency of manpower, materials, equipment and resources
- Key in litigation support, experienced in technical expert witness support and testimony

2014 - 2016

### Director, Chemistry • Chemir, a division of Evans Analytical Group

- Direct operations of Chemir's investigative analytical laboratory
- Supervise 6 groups of scientists involved in synthesis, analytical chemistry and formulation projects
- Communicate with technical staff about new projects and troubleshooting existing projects
- Manages Chemir's custom synthesis operations, designs technical plans and provides
- Key member of litigation support team, experienced in technical expert witness support and testimony

2011 – 2014

### Senior Scientist, Senior Manager of Custom Synthesis • Chemir, a division of Evans Analytical Group

- Responsible for operations and supervision of the custom synthesis group. Responsibilities include: issuing proposals, providing technical expertise for quoters, supervising custom synthesis team, project management, client contact and technical expert testimony.

2010 – 2011

### Senior Lab Manager & Technical Affairs • Chemir Analytical Services/Cyanta

- Responsible for operations and supervision of the custom synthesis group. Responsibilities include conducting bench-scale experiments, project management, client contact and issuing proposals.

2008 – 2010

**Site Head & Technical Affairs** • Azopharma/IQsynthesis

- Responsible for operations, issuing proposals, project management, conducting bench-scale experiments, supervision of all personnel, client contact and invoicing.

2006 – 2008

**Senior Scientist** • IQsynthesis, Inc.

- Responsible for conducting bench-scale experiments, project management, client contact and writing proposals. Maintenance and repair of several instruments (NMRs, GC/MS, FT-IR), and IT

1995 – 2006

**Vice President and Co-Founder** • Gateway Chemical Technology, Inc.

- Responsible for issuing proposals, project management, synthesis (key intermediates, scale up, (NMRs, GC/MS, FT-IR) and IT support.

1992 – 1995

**Senior Chemist, Medicinal Chemistry** • Chemir Analytical Services/Cyanta

- Responsible for operations and supervision of the custom synthesis group. Responsibilities include conducting bench-scale experiments, project management, client contact and issuing proposals.

2008 – 2010

**Site Head & Technical Affairs** • HemaGen/PFC

- Responsible for the synthesis of novel compounds in the new drug discovery in support of the magnetic resonance imaging, ultrasound imaging and drug delivery programs. Process development in the blood substitute program.

1990 – 1992

**Postdoctoral Fellow** • Colorado State University

- Designed and conducted organic reactions

1990

**Visiting Scholar** • G.D. Searle & Co.

- Three month internship in the Central Nervous System Department investigating non-steroidal anti-inflammatory drugs under the guidance of Dr. E. Ann Hallinan.

1987 – 1990

**Graduate Student and Teaching Assistant** • Northwestern University, Evanston, IL

- Designed and conducted organic reactions. Presented classroom lectures, conducted problem solving sessions

1986 – 1987

**Research Assistant** • Illinois Institute of Technology, Chicago, IL

- Conducted research in the isolation and identification of naturally occurring oligosaccharides under the direction of Professor C. Allen Bush

1986

**Teaching Assistant** • Illinois Institute of Technology, Chicago, IL

- Supervised an advanced undergraduate organic laboratory for Professor Satoshi Ikuta

## SKILLS

- Experience in organic synthesis and process development
- Thorough knowledge and proficiency in modern spectroscopic methods and chromatographic techniques (NMR, IR, GC, GC/MS, LC, LC/MS)

## HONORS AND AWARDS

- American Institute of Chemists, Undergraduate Award in Analytical Chemistry
- Sigma Xi
- Dean's List, IIT

## PUBLICATIONS

S.-S. Wu, A.C. Lee, and C.A. Bush *Biochim. Biophys. Acta* **1987**, *924*, 420. "Isolation of a Novel O-linked, Sulfated Polysaccharide of High Molecular Weight from an Ovarian Cyst Glycoprotein Having Blood Group 'A' Activity."

A.G.M. Barrett, B.C.B. Bezuidenhout, A.R. Howell, A.C. Lee and M.A. Russell *J. Org. Chem.* **1989** *54*, 2275. "Redox Glycosidation via Thionoester Intermediates."

A.G.M. Barrett, B.C.B. Bezuidenhout, D. Dhanak, A.F. Gasielki, A.R. Howell, A.C. Lee and M.A. Russell *J. Org. Chem.* **1989**, *54*, 3321. "Application of (Chloromethyl)aluminum 2-(2-Propenyl)anilide in the Conversion of Lactones into Protected Hydroxy Acids."

E.A. Hallinan, T.J. Hagen, R.K. Husa, S. Tsymbalov, A.C. Lee and J. P. Van Hoeck *WO 92/19617* "Substituted Dibenzoxazepine Compounds, Pharmaceutical Compositions and Methods of Use."

A.C. Lee, E.A. Hallinan, T.J. Hagen, R.K. Husa, S. Tsymbalov, and J. P. Van Hoeck *U.S. 5,378,840* "Substituted Dibenzoxazepine Compounds"

E.A. Hallinan, T.J. Hagen, R.K. Husa, S. Tsymbalov, A.C. Lee and J. P. Van Hoeck *U.S. 5,464,830* "Substituted Dibenzoxazepine Compounds, Pharmaceutical Compositions and Methods of Use."

A.G.M. Barrett and A.C. Lee *J. Org. Chem.* **1992**, *57*, 2818. "Redox Glycosidation: Stereoselective Synthesis of 1-6 Linked Disaccharides via Thionoester Intermediates."

E.A. Hallinan, T. J. Hagen, S. Tsymbalov, R.K. Husa, A.C. Lee, A. Staplefield and M. A.Savage *J. Med. Chem.* **1996**, *39*, 609-13. "Aminoacetyl Moiety as a Potential Surrogate for Diacylhydrazine Group of SC-51089, a Potent PGE2 Antagonist, and Its Analogs."

E.A. Hallinan, T.J. Hagen, R.K. Husa, S. Tsymbalov, J. P. Van Hoeck and A.C. Lee *U.S. 5,576,315* "Substituted Dibenzoxazepine Compounds and Methods For Treating Osteoporosis and Ischemia."

W.P. Cacheris, T.J. Richard, R.C. Grabiak, A.C. Lee *U.S. 5,614,170*. "Para-magnetic Complexes of N-Alkyl-N-Hydroxylamides of Organic Acids and Emulsions Containing Same for Magnetic Resonance Imaging (MRI).

W.P. Cacheris, T.J. Richard, R.C. Grabiak, A.C. Lee *WO 9616679 A1*. "Paramagnetic Complexes of N-Alkyl-N-Hydroxylamides of Organic Acids and Emulsions Containing Same for Magnetic Resonance Imaging (MRI).

DEPOSITIONS  
AND  
TESTIMONIES

K. L. Hodge, S. Sharma, R.J. Kaufman, A.C. Lee and R. W. von Borstel US 7,361,686B2. "Compounds for the Treatment of Metabolic Disorders."

K.L. Hodge, S. Sharma, R.J. Kaufman, A.C. Lee and R. W. von Borstel WO 2004093806. "Preparation of Benzyloxyphenyl Acids and Related Compounds for the Treatment of Metabolic Disorders."

K.L. Hodge, S. Sharma, A.C. Lee, R.W. von Borstel US 7,605,181 "Method for the Treatment of Metabolic Disorders."

K.L. Hodge, S. Sharma, A.C. Lee, R.W. von Borstel US 7,615,575  
"Compounds for the Treatment of Metabolic Disorders."

K.L. Hodge, S. Sharma, A.C. Lee, R.W. von Borstel US 7,932,290  
"Method for the Treatment of Metabolic Disorders."

- Valeant Pharmaceuticals Luxembourg S.A.R.L and Valeant Pharmaceuticals North America LLC vs. Actavis Laboratories UT, Inc. Civil Action No. 2:16-cv-04344-JLL-JAD Deposition November 2017, US District Court District of New Jersey
- CIPLA Ltd. Vs. Sunovion Pharmaceuticals, Inc. Civil Action No. 15-cv-00424(LPS) Deposition November 2017, US District Court District of Delaware
- Testified on behalf of Client before the Consumer Product Safety Commission. Defended validity of testing conducted in EAG U.S. and China laboratories. October 2015
- Uflex Packaging Inc. and Uflex Limited v. The Promotion in Motion Brands, Inc. and PIM Brands, LLC Civil Action No. SOM-L-320-12 Deposition October 2015 in Superior Court of New Jersey
- LifeNet Health vs LifeCell Corporation, Civil Action No. 2:13cv486/CHM-DEM Deposition October 2014, US District Court for the Eastern District of Virginia, Norfolk Division
- Endo Pharmaceuticals, Inc. vs. Mylan Pharmaceuticals, Inc. and Mylan, Inc., Civil Action No. 11-cv-00717-JEI-KW Deposition March 2013, Testimony November 2013, accepted as expert in organic chemistry and analytical chemistry, US District Court of Delaware
- Kaneka Corporation vs. Zhejiang Medicine Co., Ltd., ZMC-USA, LLC, Kiamen Kingdomway Group Company, Pacific Rainbow International, Inc., Mitsubishi Gas Company, Inc., Maypro Industries, Inc. and Shenzhou Biology & Technology Co., Ltd., Deposition May 2012, Testimony July 2012, qualified as an expert in organic chemistry and analytical chemistry, US International Trade Commission docket number 2822
- Cephalon, Inc. and Cephalon France vs. Watson Laboratories, Inc., Sandoz Inc., Lupin Ltd., Apotex Corp. and Apotex Inc., MDL Docket No. 1:10-md-2200-GMS Deposition January 2012, Testimony July 2012 US District Court District of Delaware, accepted as an expert in synthetic organic chemistry and medicinal chemistry

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- Solutec Corp., Inc. v. Steve Agnew, Terry Ingle and Suzette Ingle., Civil Action No. 95-2-00234-9  
Testimony December 2011, Superior Court of Washington for Yakima County
  - Albany Molecular Research, Inc. and Sanofi-Aventis vs. DRL, Ltd. and DRL, Inc. Civil Action No. 09-4638 Deposition December 2010, US District Court District of  
New Jersey