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SUMMARY

Thirty-five years of experience in biology. Lipscomb Distinguished Professor of Agriculture at Arkansas State University; CEO of two biotechnology start-up companies; Previously, Associate Vice Chancellor for Research and Technology Transfer at ASU; Program Director in Molecular and Cellular Biosciences at the National Science Foundation: Leader in forming one of the world's foremost transgenic plant research groups at ProdiGene, a plant biotechnology company; Director of the cell biology group for plant production of therapeutic proteins at Pioneer Hi-Bred International, a Fortune 500 Company; Internationally recognized for research program and associated expertise as evidenced by over 80 publications and patents as well as invitations to speak nationally and internationally; Advisor for Biotechnology graduate programs; Ph.D. in Plant biology awarded by Washington University and Master of Science in Botany awarded by Oklahoma State University.

PROFESSIONAL EXPERIENCE

ARKANSAS STATE UNIVERSITY—Jonesboro, Arkansas

2004-present

Lipscomb Distinguished Professor of Agriculture (2008-present)

- **Chair, AR Research Alliance conference on Bioenergy and Biobased Products, Oct. 2011**
- Senior faculty in agricultural biotechnology
- Director, Center of Excellence for Bio-products—ad hoc faculty research group
- Managed \$3.7 million DOE research grant for enzymes in plants
- Research cluster lead for statewide NSF EPSCoR grant
- Teach plant biotechnology, graduate orientation, experiment to patent, and advanced cell biology
- Honors program representative for college
- PRT and graduate committees in college
- Chair of Institutional Biosafety Committee
 - Employer: Arkansas State University College of Agriculture
 - PO Box 1080, State University, AR 72467;
 - Dates: Sept., 2008-present
 - 40 hours per week, plus
 - Salary: \$90,000
 - Supervisors: Gregory Phillips, gphillips@astate.edu; 870-897-2265 (you may contact)
 - Donald Kennedy, dkennedy@astate.edu; 870-972-3704 (no contact)
 - Timothy Burcham, tburcham@astate.edu; 870-972-2085 (no contact)

Associate Vice Chancellor for Research and Technology Transfer. (2004-2008)

Chief research officer for ASU responsible for grant proposal submissions; funding information dissemination; committees for compliance with federal guidelines in research; implementation of conflict of interest policy, contracts, invention disclosures and patent filing, and technology transfer in the interest of regional economic development.

- Set up research office functions
- Established the ASU Research and Innovation Foundation and associated infrastructure (501.c3)
- Instituted an Intellectual Property policy
- Instituted a Conflict of Interest and Commitment policy
- Filed 8 patent applications based on invention disclosures, a new activity for ASU
- Led discussions on Business Incubator and Research Park implementation plan
- Instituted an ORTT Newsletter
- Composed new RFPs for internal funding sources
- Generated database for pre-award tracking and reporting

- Managed government relations for Congressionally directed funding
 - \$6 MM in FY 2005
 - \$7 MM in FY 2006
 - \$4 MM in FY 2007 (Dept. of Defense and Homeland Security)
 - \$3.5 MM with Dept. of Energy
- Spear-headed Symposium and Workshop on Identity Solutions with grant from AR Science and Technology Authority.
- Spear-headed effort to secure state-wide EPSCOR infrastructure grant from NSF
- Mentored 3 start-up technology companies.
- Established research investment with indirect cost recovery budget.
- **Established an active research laboratory in plant-based enzyme production technologies.**
 - Employer: Arkansas State University Office of Research and Technology Transfer
 - PO Box 2760, State University, AR 72467;
 - Dates: Sept., 2004-Sept. 2008
 - 40 hours per week, plus
 - Salary: \$140,000-\$155,000
 - Supervisor: Susan Davis Allen; sdallen913@gmail.com; 870-340-6600 (you may contact)

EXPERT WITNESS FOR PLANT BIOTECHNOLOGY—Jonesboro, AR

2012-2013

Served Plaintiff as expert witness to verify scientific records in support of a lawsuit against a former employee who was accused of stealing trade secrets. The lawsuit settled out of court within 1 week of my deposition.

- Employer: Biotechnology Company (confidential)
- Dates: October, 2012-July, 2013
- ~5 hours per week
- \$200 per hour plus expenses
- Contact for lawsuit: Maralee Eriksen, Boutin Jones, Inc., (916) 321-4444 (no contact)

INFINITE ENZYMES, LLC—Jonesboro, AR

2006-present

CEO, Responsible for fund-raising and scientific decisions as well as partnerships
Incorporated company in July, 2006 to commercialize enzymes for industrial applications; Currently addressing issues for cost-effective enzymes for the cellulosic ethanol industry

- Raised and leveraged state funds to develop transgenic corn lines for production
- Received 2 Phase I SBIR grants and one Phase II
- Four grain production fields completed
- Organized collaborators and licenses to accomplish production
- First sales accomplished fall 2012
- Manage collaborations to establish new products
- Initiated de-regulation discussions and implementation
 - Employer: Infinite Enzymes, LLC
 - PO Box 2654; State University, AR 72467
 - Dates: July, 2006-present
 - 10 hours per week
 - Salary: \$0
 - Supervisor: Self employed

INFINITE-EVERSOLE STRATEGIC CROP SERVICES, LLC—Jonesboro, AR

2009-present

CEO, Responsible for agreements, budget, grant-writing and scientific consultation with programmers
Incorporated company in April, 2009, as a joint venture between Infinite Enzymes and Eversole Associates to address issues in deregulation of Specialty Crops and for small crop developers

- Funded through USDA SBIR Phase I (2009)
- Collaborative research to establish new paradigm for achieving non-regulated status for transgenic crops
- Set up agreements among participants—NDAs, letters of intent, MOUs, subaward agreements
- Filed first patent application for business model
 - Employer: Infinite Eversole Specialty Crop Services
 - 826 Sherwood Oaks Lane, Jonesboro, AR 72404;

- Dates: Sept., 2009-present
- 1-5 hours per week
- Salary: \$0
- Supervisor: Self-employed

NATIONAL SCIENCE FOUNDATION – Arlington, Virginia

2003-2004

Program Director, Molecular and Cellular Biosciences, Signal Transduction/Cellular Regulation program

Responsible for funding decisions on proposals submitted to the NSF from non-industry groups. Worked with colleagues to assign proposals to appropriate panels, solicit peer reviews, assemble and direct review panels, make funding decisions, manage program budget (~\$10 million). Conducted site visits and outreach

- Employer: National Science Foundation
4201 Wilson Ave.; Arlington, VA 22230
- Dates: Sept., 2003-Sept. 2004
- 40 hours per week, plus
- Salary: \$120,000
- Supervisor: Maryanna Henkart, retired and I do not know contact information

PRODIGENE - College Station, Texas

1997 - 2003

Principal Investigator, SBIR grants, Industrial Proteins (2003)

Responsible for achieving objectives laid out in each of 2 Phase I SBIR awards from the USDA. Projects: 1) Cellulases for Biomass Conversion from the Transgenic Maize Production System; and 2) Efficacy of Recombinant Redox Enzymes from Corn in Wood and Textile Applications.

- Wrote applications meriting the awards—two awards from one panel.
- Organized applications trials for two redox enzymes with three collaborators and established contracts.
- Organized employees at ProdiGene to develop and perform assays to determine expression of cellulases in transgenic maize.
- Wrote successful Phase II application for the cellulase project.
 - Employer: ProdiGene, Inc.
 - Industrial Blvd., College Station, TX 77845
 - Dates: May 2003-August 2003
 - 20 hours per week
 - Salary: \$60,000
 - Supervisor: John A. Howard; jhoward@appliedbiotech.org 805-234-6746 (you may contact)

Vice President, Industrial Proteins Business Unit (2002)

Responsible for setting business unit goals and writing the business plan for this unit within ProdiGene. Established and maintained business unit budget; Managed the program in biomass conversion.

- Developed the product plan for two protein products from research and negotiated a contract for commercialization of products developed through a collaborator.
- Established and managed contractual applications-testing in numerous industries resulting in identification of lucrative product markets to pursue.
- Established and managed critical contracts for research collaborations resulting in added value to the company.
- Evaluated invention disclosures and filed intellectual property documentation.
- Participated fully in the management of the company and represented the company and business unit at scientific and trade meetings generating increased interest in the company.
- Assembled a deregulation package for first product to present to USDA, meeting all time and budgetary constraints.
 - Employer: ProdiGene, Inc.
 - Industrial Blvd., College Station, TX 77845
 - Dates: May 2002-Sept 2002
 - 40 hours per week
 - Salary: \$120,000
 - Supervisor: John A. Howard; jhoward@appliedbiotech.org 805-234-6746 (you may contact)

Vice President, Technology (1999 - 2002)

Responsible for setting priorities and goals for 30 full and part-time staff; Functional groups included: Molecular Biology, Transformation, Biochemistry, Genetics, Greenhouse, Laboratory Support Services and New Technologies.

- Developed, implemented and managed a technology program that addressed goals in foreign protein expression, plant health and research efficiency.
- Represented the company in developing new collaborative efforts by presenting talks on the technology of the company, developing collaborator confidence in company technology.
- Reviewed and implemented programs that improved the efficiency of the process for developing products in the research group.
- Wrote business rules for, implemented and managed database for company research groups that contained over two million entries.
- Managed product projects for major company collaboration on two products, motivating the collaborator to increase the project numbers three-fold.
- Acted as liaison with outside patent counsel for searches, disclosures and patent writing.
- **Developed a program in biomass conversion that encompassed design of research, applications for funding, gathering tools and identification of collaborators.**
 - Employer: ProdiGene, Inc.
 - Industrial Blvd., College Station, TX 77845
 - Dates: May 1999-May 2002
 - 40 hours per week plus
 - Salary: \$90,000-120,000
 - Supervisor: John A. Howard; jhoward@appliedbiotech.org 805-234-6746 (you may contact)

Director, Cell Biology (1997 - 1999)

- Developed and implemented a transformation system for maize suitable for commercial production of protein products.
- Hired personnel and set up group to perform transformation and cell biology experiments, including DNA hybridization screening of transgenic plants.
- Led effort to achieve USDA approval for greenhouse and laboratory facilities to conduct experiments with transgenic plants.
- Designed the laboratory layout and greenhouse for new building. Set up greenhouse operations in first ProdiGene location.
 - Employer: ProdiGene, Inc.
 - Industrial Blvd., College Station, TX 77845
 - Dates: January 1997-May 1999
 - 40 hours per week plus
 - Salary: \$70,000-90,000
 - Supervisor: John A. Howard; jhoward@appliedbiotech.org 805-234-6746 (you may contact)

PIONEER HI-BRED INTERNATIONAL - Johnston, IA

1994 - 1996

Research Manager, Cell Biology

- Set up cell biology group for new functional area, Protein Products, within Pioneer research.
- Set up transformation systems for soybean, canola and corn.
- Redesigned laboratory for more efficient use of space and to allow addition of equipment.
- Managed product development for first Protein Products collaborator comprising four products. **One of the products, *avidin*, was the first protein commercialized from a transgenic plant. β -glucuronidase and trypsin were the second and third protein products commercialized from transgenic plants. Aprotinin was the fourth.**
 - Employer: Pioneer Hi-Bred International.
 - NW 72nd Street, Johnston, IA 50131
 - Dates: December 1994-December 1996
 - 40 hours per week plus
 - Salary: \$58,500-80,000
 - Supervisor: John A. Howard; jhoward@appliedbiotech.org 805-234-6746 (you may contact)

UTAH STATE UNIVERSITY, Logan UT

1988 – 1994

Assistant Professor of Biology

- Employer: Utah State University
Logan, UT 84321
- Dates: August 1988-November 1994
- 40 hours per week plus
- Salary: \$28,500-44,500
- Supervisor: Richard Brody, retired, contact information unknown

SWEDISH UNIV. OF AGRICULTURAL SCIENCES, Uppsala, Sweden

1988

Visiting Researcher

- Employer: Swedish University of Agricultural Sciences; Uppsala Sweden
- Dates: March 1988-August 1988
- 40 hours per week
- Salary: \$25,000
- Supervisor: David Clapham; Dalgatan 11C; Uppsala, Sweden; S752 28 (you may contact)
- David.Clapham@slu.se

WASHINGTON UNIVERSITY, St. Louis MO

1981 - 1988

Ph.D. student and Post-doctoral research associate

- Employer: Washington University in St. Louis; Skinker Blvd., St. Louis, MO 63103
- Dates: August, 1981-March, 1988
- 20-40 hours per week
- Salary: \$7,000-21,500
- Supervisor: Mary-Dell Chilton; Syngenta, Raleigh NC; (you may contact)
- Joseph Varner, Deceased

EDUCATION

Ph.D. Washington University, St. Louis, MO, Plant Biology

1985

M.S. Oklahoma State University, Stillwater, OK, Botany

1980

B.A. University of Oklahoma, Norman, OK, Sociology

1974

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SUPPLEMENTAL INFORMATION

OTHER PROFESSIONAL EXPERIENCE

2014-present	Member-at-large, Executive Committee AAAS Ag Division
2013	Member of Great Lakes Bioenergy Center Review Panel
2013	Primary Reviewer of European COST Action Program
2013-present	Advisory Board, Ag Innovation Development Group, Memphis, TN
2012-2013	Expert Witness, International Biotechnology law suit
2011-present	Advisory Board, AR Advanced Energy Foundation, Little Rock, AR
2009-present	Advisory Board, AgBioWorks Foundation, Memphis, TN
2011	Chair, ARA conference on Biobased Products and Bioenergy
2002-present	Advisory Board, Plant Biotechnology Journal
2005-2007	Handling Editor, Reviews Editor, Plant Biotechnology Journal
2004-present	Specialty Crops Regulatory Assistance Executive Committee
1990-present	Grant Panels: USDA Risk Assessment; NSF BES; Teacher Preparation and Enhancement; USDA Non-Food Uses of Crops; NSF MRI
2003-Present	Editorial Board, Transgenic Research
2000-2007	Member, Faculty of 1000, Agricultural Biotechnology
2000-2003	Editorial Board, Molecular Breeding
2002-2005	Advisory Board-TAMU Institute of Food Science and Engineering
2000-2002	Member, TAMU, Center for Nutrition, Health and Food Genomics
2000	Workshop organizer, IBC conference; Agricultural Genomics
2000-2002	Advisor, Univ. of South Carolina Professional Master's Program
1999	Adjunct Professor, Dept. of Biology, Texas A&M University
1997-2005	Adjunct Professor, Dept. of Biochem/Biophys Texas A&M Univ.
1997-2004	TAMU Molec and Environmental Plant Sciences (MEPS) Faculty

RESEARCH INTERESTS

Renewable resources—particularly biomass to biobased products

Foreign gene expression in transgenic plants

Plant cell wall structure and function

Plant cell biology and protein targeting

HONORS AND PROFESSIONAL AFFILIATIONS

Academic Professional of the Year, Who's Who Worldwide 2012
Fellow, American Society of Plant Biologists, 2010
Member, American Society of Plant Biologists (ASPB) 1977-present
Chair, Board of Trustees, ASPB 2004-2005; Board of Trustees, ASPB 2002-2005
Candidate for President, ASPB 2002
Executive Committee, ASPB 2002, 2005
Chair, ASPB Women in Plant Biology Committee, 2001-2002
Member, International Society for Plant Molecular Biology
Member, Society for In Vitro Biology
2000-Woman to Watch, Business & Professional Women, Brazos County, TX
Sigma Xi, Phi Kappa Phi

REFEREED PUBLICATIONS

Molecular farming

Hood, E.E., D.R. Witcher, S. Maddock, T. Meyer, C. Baszczynski, M. Bailey, P. Flynn, J. Register, L. Marshall, D. Bond, E. Kulisek, A. Kusnadi, R. Evangelista, Z. Nikolov, C. Wooge, R.J. Mehig, R. Hernan, W.K. Kappel, D. Ritland, C.P. Li and J.A. Howard 1997 **Commercial production of**

avidin from transgenic maize: Characterization of transformant, production, processing, extraction and purification. Molecular Breeding 3:291-306

Witcher, D.R., **E.E. E. Hood**, D. Peterson, M. Bailey, D. Bond, A. Kusnadi, R. Evangelista, Z. Nikolov, C. Wooge, R. Mehig, W. Kappel, J.C. Register, and J.A. Howard 1998 **Commercial production of β -glucuronidase (GUS): A model system for the production of proteins in plants.** Molecular Breeding 4:301-312

Kusnadi, A.R., **E.E. E. Hood**, D.R. Witcher, J.A. Howard and Z.L. Nikolov 1998 **Production and purification of two recombinant proteins from transgenic corn** Biotechnol. Prog. 14:149-155

Kusnadi, AR, RL Evangelista, **EE Hood**, JA Howard and ZL Nikolov 1998 **Processing of transgenic corn seed and its effect on the recovery of recombinant β -Glucuronidase** Biotechnol and BioEngineering 60:44-52

Zhong, G.Y., D. Peterson, D.E. Delaney, M. Bailey, D.R. Witcher, J.C. Register III, D. Bond, C.-P. Li, L. Marshall, E. Kulisek, D. Ritland, T. Meyer, **E.E. E. Hood** and J.A. Howard 1999 **Commercial production of aprotinin in transgenic maize seeds** Molecular Breeding 5: 345-356

Hood, E. and J. Howard 1999 **Protein products from transgenic plants** Agro-Food-Industry Hi-Tech, 3, Vol.10, May/June pp. 35-36

Hood, E. and J. Jilka 1999 **Plant based production of xenogenic proteins** Current Opinion in Biotechnology, 10:4, 382-386

Jilka, J.M., **E.E. E. Hood**, R. Dose and J.A. Howard 1999 **The benefits of proteins produced in transgenic plants.** AgBiotechNet, Vol. 1, September, ABN 027

Streatfield, S. J., J. M. Jilka, **E. E. E. Hood**, D. D. Turner, M. R. Bailey, J. M. Mayor, S. L. Woodard, K. K. Beifuss, M. E. Horn, D. E. Delaney, I. R. Tizard and J. A. Howard 2001 **Plant-based vaccines: unique advantages** Vaccine 19:2742-2748

Streatfield, S.J., J.M. Mayor, D.K. Barker, C. Brooks, B.J. Lamphear, S.L. Woodard, K.K. Beifuss, D.V. Vicuna, L.-A. Massey, M.E. Horn, D.E. Delaney, Z.L. Nikolov, **E.E. E. Hood**, J.M. Jilka and J.A. Howard 2002 **Development of an edible subunit vaccine in corn against enterotoxigenic strains of *Escherichia coli*.** In Vitro Cell. Dev. Biol.-Plant 38:11-17 (Highlighted in 'In Vitro Report')

Hood, E.E. 2002 **From Green Plants to Industrial Enzymes** Enzyme and Microbial Technology 30:279-283

Hood, E.E., Z.L. Nikolov 2002 **Making therapeutic proteins in transgenic corn. Tutorial: Manufacturing low-cost, high-purity, clinical-grade proteins in corn** Genetic Engineering News 22:48

Hood, E.E., S.L. Woodard and M.E. Horn 2002 **Antibody manufacturing in transgenic plants: Myths and Realities** Current Opinion in Biotechnology, 13, 630-635

Lamphear, B.J., Streatfield, S.J., Jilka, J.M., Brooks, C.A., Barker, D.K., Turner, D.D., Delaney, D.E., Garcia, M., Wiggins, B., Woodard, S.L., **Hood, E.E.**, Tizard, I.R., Lawhorn, B. and Howard, J.A. 2002 **Delivery of subunit vaccines in maize seed.** J. Controlled Release, 85. 169-180

Hood, E.E., M.R. Bailey, K. Beifuss, M. Horn, M. Magallanes-Lundback, C. Drees, D. E. Delaney, R. Clough and J. A. Howard 2003 **Criteria for high-level expression of a fungal laccase gene in transgenic maize** Plant Biotechnology Journal. 1, 129-140

Streatfield, S.J., Lane, J.R., Brooks, C.A., Barker, D.K., Poage, M.L., Mayor, J.M., Lamphear, B.J., Drees, C.F., Jilka, J.M., **Hood, E.E.** and Howard, J.A. 2003 **Corn as a production system for human**

and animal vaccines Vaccine 21:812-815

- Bailey, M.R., S.L. Woodard, E. Callaway, K Beifuss, D. Delaney, M. Magallanes-Lundback, J. Lane, M.E. Horn, M. Ward, F. Van Gastel, J.A. Howard, **E.E. E. Hood** 2004 **Improved recovery of active recombinant laccase from maize seed** Applied Microbiology and Biotechnology 63(4):390-7, (2003 Epub)
- Woodard, S.L., J.M. Mayor, M.R. Bailey, D.K. Barker, R.T. Love, J.R. Lane, D.E. Delaney, J.M. McComas-Wagner, H.D. Mallubhotla, E.E. Hood, L.J. Dangott, S.E. Tichy and J.A. Howard. 2003 **Maize-derived bovine trypsin: Characterization of the first large-scale, commercial protein product from transgenic plants.** Biotechnology and Applied Biochemistry 38:123-130
- Streatfield, S.J., M.E. Magallanes-Lundback, K.K. Beifuss, C.A. Brooks, R.L. Harkey, R.T. Love, J. Bray, J.A. Howard, J.M. Jilka and E.E. Hood. 2004 **Analysis of the maize *polyubiquitin-1* promoter heat shock elements and generation of promoter variants with modified expression characteristics.** Transgenic Research 13(4):299-312
- Lamphear, BJ DK Barker, CA Brooks, DE Delaney, JR Lane, K Beifuss, R Love, K Thompson, J Mayor, R Clough, R Harkey, M Poage, C Drees, ME Horn, SJ Streatfield, Z Nikolov, SL Woodard, EE Hood JM Jilka, and JA Howard. 2005 **Expression of the Sweet Protein Brazzein in Maize for Production of a New Commercial Sweetener** Plant Biotechnology J 3:103-114
- Hood, EE** 2004 **Bioindustrial and Biopharmaceutical Products from Transgenic Plants** Online publication at 4th ICSC, Brisbane Australia
http://www.cropscience.org.au/icsc2004/symposia/3/5/1955_hoode.htm
- Howard, JA and **Hood, EE**. 2005 **Bioindustrial and Biopharmaceutical Products Produced in Plants** Adv in Agron 85:91-124
- Clough, RC, Beifuss, K, Lane, J, Pappu, K, Thompson, K, Bailey, MR, Delaney, DE, Harkey, R, Drees, C, Howard, JA and **Hood, EE**. 2006 **Recombinant manganese peroxidase from the white-rot fungus *Phanerochaete chrysosporium* is enzymatically active and accumulates to high levels in transgenic corn seed.** Plant Biotechnology Journal 4:53-62
- Hood, EE** and Woodard, SL 2006 **Commercialization of a Protein Product from Transgenic Maize,** NABC Report 17: Agricultural Biotechnology: Beyond Food and Energy to Health and the Environment: 147-158.
- Howard, JA and **Hood, EE** 2007 **Methods for growing nonfood products in transgenic plants;** Crop Science; 47:1255-1262.
- Hood, EE**, Love R, Bray, J, Lane, J, Clough, RC, Pappu, K Drees, C, Hood, KR, Yoon, S, Ahmad, A and Howard, JA; 2007 **Subcellular targeting is a key condition for high-level accumulation of cellulase protein in transgenic maize seed.** Plant Biotechnology J; 5:709-719
- Jimenez-Flores, R, G Fake, J Carroll, **EE Hood** and J Howard; 2010; **A Method for Evaluating the Release of Fermentable Sugars from Cellulosic Feedstock;** Enzyme and Microbial Technology; 47 (5) 206-211
- Vicuna Requesens, D, E Egelkrout, SP Devaiah and **EE Hood**; 2011; **A method for transient expression in maize endosperm;** In Vitro Cellular and Developmental Biology--Plant 46 (6):485-490
- Johnson, D, K Teoh, C Ashby, **EE Hood**, X Huang; **Microarray analysis to determine factors of protein expression enhancement in transgenic maize seed;** Proceedings of IEEE BIBM Workshop of Integrative Data Analysis in Systems Biology (IDASB), 2010.
- Hood, EE**, SP Devaiah, G Fake, E Egelkrout, K Teoh, D Vicuna Requesens, Y-K Chang, C Hayden, KR Hood, K Pappu, J Carroll and JA Howard; 2012 **Manipulating corn germplasm to increase**

recombinant protein accumulation; *Plant Biotechnology Journal*, [10 \(1\)](#): 20–30 doi: 10.1111/j.1467-7652.2011.00627.

Hayden, C, G Fake, J Carroll, **EE Hood** and JA Howard; 2012; **Synergistic Activity of Plant Extracts with Microbial Cellulases for the Release of Free Sugars;** *BioEnerg Res*, 5 (2) : 398-406 DOI 10.1007/s12155-011-9149-z

Sparrow, Penelope, Broer, Inge, Hood, Elizabeth E, Eversole, Kellye, Hartung, Frank, Schiemann, Joachim; 2013; **Risk assessment and regulation of molecular farming – a comparison between Europe and US;** *Current Pharmaceutical Design*, 19:

Devaiah, Shivakumar Pattada, Vicuna Requesens, Deborah, Chang, Yeun-Kyung, Hood, Kendall R, Flory, Ashley, Howard, John A. and **Hood, Elizabeth E;** **Heterologous expression of cellobiohydrolase II (Cel6A) in maize endosperm;** *Transgenic Research—Plant*, 22 (3):477-488; DOI 10.1007/s11248-012-9659-2.

Egelkrout, Erin, McGaughey, Karen, Keener, Todd, Ferleman, Amberlyn, Woodard, Susan, Devaiah, Shivakumar, Nikolov, Zivko, **Hood, Elizabeth**, Howard, John. 2013; **Enhanced expression levels of cellulase enzymes using multiple transcription units;** *Bioenergy Research*, 6 (2):699-710 DOI 10.1007/s12155-012-9288-x.

Teoh, Keat (Thomas), Vicuna Requesens, Deborah, Devaiah, Shivakumar P, Johnson, Daniel, Huang, Xiuzhen, Howard, John A, and **Hood, Elizabeth E.** 2013 **Transcriptome analysis of embryo maturation in maize,** *BMC Plant Biology*, 13:19-35 doi:10.1186/1471-2229-13-19

Egelkrout, E., Dabul, A.M., Keener, T. **Hood, E.E.** and Howard, J.A.; **Identification and characterization of a pericarp-preferred promoter in maize;** Manuscript submitted

Garda, M., Vicuna Requesens, D.V., Devaiah, S.P., Hood, K.R., Chang, Y.K., Dabul, A.N. and **Hood, E.E.;** **Assessment of Field-Grown Cellulase-Expressing Corn;** Manuscript submitted

Hood, N.C., K.R. Hood, S.L. Woodard, S.P. Devaiah, T. Jeoh, L. Wilken, Z. Nikolov, E. Egelkrout, J.A. Howard, and **E.E. Hood;** **Purification and Characterization of Recombinant Cel7A from Maize Seed.** Manuscript submitted.

Yoon, S. and **E.E. Hood;** **Characterization of Transgenic Maize Expressing Cucumber Expansin;** Manuscript in preparation

Vicuna Requesens, D.V., Ring, R., Hood, N.C., Flory, A.R., and **Hood, E.E.;** **Assessment of endosperm-specific promoters to drive expression of cellulases in maize endosperm;** Manuscript in preparation

Plant cell walls

Hood, E.E., Q.X. Shen and J.E. Varner 1988 **A developmentally regulated hydroxyproline-rich glycoprotein in maize pericarp cell walls;** *Plant Physiol.* 87:138-142

Hood, E.E., K.R. Hood and S.E. Fritz 1991 **Hydroxyproline-rich glycoproteins in cell walls of pericarp from maize.** *Plant Science.* 79:13-22

Fritz, S.E., K.R. Hood, and **E.E. Hood** 1991 **Localization of soluble and insoluble fractions of hydroxyproline-rich glycoproteins during maize kernel development.** *J. Cell Sci.* 98:545-550

Hood, K.R., R.A. Baasiri, S.E. Fritz, and **E.E. Hood** 1991 **Biochemical and tissue print analyses of hydroxyproline-rich glycoproteins in cell walls of sporophytic maize tissues.** *Plant Physiol.* 96:1214-1219

Murphy, J.M. and **E.E. Hood** 1993 **Molecular basis of the size heterogeneity of extensin from two maize varieties.** *Plant Mol. Biol.* 21:885-893

- Hood, E.E., J.M. Murphy and R.C. Pendleton 1993 **Molecular characterization of maize extensin expression**; Plant Mol. Biol. 23:685-695
- Flory, A.R., Vicuna Requesens, D., Devaiah, S.P, Teoh, K, Mansfield, S.D and Hood, E.E. 2013. **Development of a green binder system for paper products**; BMC Biotechnology; 13:28 <http://www.biomedcentral.com/1472-6750/13/28>
- Dabul, A.M and E.E. Hood; **Bioinformatic Analysis of the B73 Extensin Gene and Promoter**; Manuscript in preparation
- Dabul, A.M. and E.E. Hood; **Extensin Protein Characterization in Reproductive Tissues of the Maize B73 Inbred**; Manuscript in preparation
- Yoon, S. and E.E. Hood; **Development of a Novel Expansin Assay**; Manuscript in preparation.

Agrobacterium

- Hood, E.E., G Jen, L Kayes, J Kramer, RT Fraley, and M.-D Chilton; 1984; Restriction endonuclease map of pTi Bo542, a potential Ti plasmid vector for genetic engineering of legumes. Bio/Technology 2:702-708
- Chilton, W.S., E.E. Hood and M.-D Chilton 1985; Absolute stereochemistry of leucinopine, a crown gall opine. Phytochem. 24:221-224
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ELIZABETH E. HOOD, Ph.D.

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- Hood, E.E. **Process for Commercialization of Products from Transgenic Plants**; LSU invited seminar, Baton Rouge, LA, April 8, 2008
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ELIZABETH E. HOOD, Ph.D.

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ELIZABETH E. HOOD, Ph.D.

Teoh, Keat, Daniel Johnson, Yeun-Kyung Chang, Ashley Flory, Xiuzhen Huang and **Elizabeth Hood**; **Transcriptome Analysis of Maize Embryos**; Invited Oral and Poster Presentations at the Cambridge Healthtech Institute's Inaugural Plant Sequencing: *Genotype to Phenotype Correlations*; San Diego, CA; March 16-18, 2011

C. Biedenbender (UALR), D. Berleant (UALR), K. Eversole (IE-SCS), **E. Hood** (ASU), L. Leach (IE-SCS), R. Mustell (IE-SCS), R. Segall (ASU), and D. Vicuna (ASU), **Text Mining: Using Rule Based and Neural Network Based Approaches**, 2011 UALR Student Research Expo, Little Rock, April 11.

Yoon, S., Devaiah, S.P., Hayden, C., Howard, J., Hood, E.E.; **Novel Expansin Assay Development and Characterization of Transgenic Corn Expansin**; 2011 P3 meeting at AR P3 Symposium & AR NSF EPSCoR Annual Meeting; Heber Springs, July 26-28, 2011

Vicuna Requesens, D., Devaiah, S., Chang, Y-K., and **Elizabeth E. Hood**; **Stable endosperm-production of CBHI exocellulase in maize**; Invited oral presentation at the American Council for Medicinally Active Plants; Arkansas State University Biosciences Institute, May 22-25, 2012—first place winner for conference oral presentations.

Yoon, S., Devaiah, S.P., Hayden, C, Howard, J.A., **Hood, E.E.**; **Novel Expansin Assay Development and Characterization of Transgenic Corn Expansin**; 3rd Annual Conference American Council for Medicinally Active Plants May 22 – 25, 2012 Arkansas State University, Jonesboro, AR

Dabul, A.N., Vicuna Requesens, D., & **Hood, E.E.** **Promoter study of the HRGP gene from B73 corn**; 3rd Annual Conference American Council for Medicinally Active Plants May 22 – 25, 2012 Arkansas State University, Jonesboro, AR

STUDENTS AND POST-DOCs MENTORED

Deborah Vicuna Requesens, post-doctoral, ASU 2008-2012
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Sangwoong Yoon, PhD student, ASU, 2006-2012
Audrei Dabul, PhD student, ASU, 2007-2012
Ashley Flory, MS student, ASU, 2010-2011
Martina Garda, MS student, ASU, 2009-2011
Rebecca Ring, undergraduate student, ASU 2012-present
Heather Morrissey, undergraduate student, ASU 2014-present
Leah Chunestudy, undergraduate student, ASU 2007-2010
April Prunty, high school and undergraduate student, Jonesboro and ASU 2007-2011
Ne'Cura White, undergraduate student, ASU 2011
Mindalyn Breckenridge, undergraduate student, ASU 2009-2011
Amanda Vinas, undergraduate student, ProdiGene
Lacy Lovelace, undergraduate student, USU
Susan Brown, undergraduate student, USU
Jenifer Murphy, MS student, USU
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Peer Reviewer for the following journals:

- Plant Biotechnology Journal
- Transgenic Research
- Journal of Agricultural & Environmental Ethics (JAGE)
- Plant Molecular Biology
- African Journal of Microbiology Research
- BioMed Research International

ELIZABETH E. HOOD, Ph.D.

- Biotechnology Advances
- BMC Biotechnology
- Energies
- Acta Physiologiae Plantarum
- PNAS
- Plant Physiology