

CURRICULUM VITAE

Fathi T. Halaweish, Ph.D.

Department of Chemistry & Biochemistry

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EDUCATION:

- Ph. D. **Pharmaceutical Chemistry/Natural Products** (1987)**
Department of Pharmaceutical Chemistry, Welsh School of Pharmacy, University of Wales, Cardiff, Wales, U.K.
- M.S. **Pharmaceutical Sciences/Natural Products** (1981)**
Department of Pharmacognosy, College of Pharmacy, University of Mansoura, Mansoura, Egypt.
- B.S. **Pharmacy [Distinction with Honor]** (1976)**
College of Pharmacy, University of Mansoura, Mansoura, Egypt.

PROFESSIONAL EXPERIENCES:

2007-present Professor, Department of Chemistry & Biochemistry, SDSU

- Taught undergraduate and graduate classes in chemistry (Organic, Bioorganic and Medicinal Chemistry)
- PI on several research projects for drug discovery from natural products, nutraceuticals, and agrochemicals, value added products and bioenergy
- Managed large research group and coordinated several projects
- Overseeing the resource requirements of my group within budgetary constraints
- Chaired academic committees, faculty recognition committee, strategic planning, college accreditation processes, strategic planning committee
- Chaired faculty search committee and Tenure and Promotion Committee
- Coordinated efforts in department, college and institution committees for curriculum development, university and department accreditation committee, recruiting undergraduate and graduate students.
- Managed NMR facility
- Advisor for undergraduate/honors, premed and graduate students for academic and research activities, wrote funded grant proposals, published articles in refereed journals, served as reviewer at USDA, NSF and industry, and several journals, presented papers at national and international conferences, and continued international collaborative research with Yunnan Normal University (YNU) and Shanghai Institute of Materia Medica, China, South Korea, Cameron University, Cameron; King Khaled University (Saudi Arabia), Authority of Accreditation and Quality Assurance, Egypt
- Reviewers for many scientific journal and organization worldwide including Qatar Foundation, tenure and promotion reviewers for King

Saud University, College of Pharmacy. Grant proposal reviewers from NIH, USDA and NSF

- 2002-2006 **Associate Professor**, Department of Chemistry & Biochemistry, SDSU.
- Taught undergraduate and graduate classes in chemistry (Organic, Bioorganic and Medicinal Chemistry)
 - PI on several research projects for drug discovery from natural products, nutraceuticals, and agrochemicals, value added products and bioenergy
 - Managed large research group and coordinated several projects
 - Overseeing the resource requirements of my group within budgetary constraints
 - Chaired academic committees, faculty recognition committee, strategic planning, college accreditation processes
 - Chaired faculty search committee
 - Coordinated efforts in department, college and institution committees, continued efforts in curriculum development, university and Department accreditation committee recruiting undergraduate and graduate students.
 - Managed NMR facility
 - Coordinated efforts in department, college and institution committees, continued efforts in curriculum development, recruiting undergraduate and graduate students, drug design, value added and bioenergy, PI on several research projects and advisor for undergraduate/honors and graduate students for academic and research activities. Wrote funded grant proposals, published articles in refereed journals, served as reviewer at USDA, NSF and industry, and several journals, presented papers at national and international conferences, and continued international collaborative research with Yunnan Normal University (YNU) and Shanghai Institute of Materia Medica, China.
- 2000-present **Adjunct Professor**, Department of Animal & Range Sciences, SDSU.
- Established collaborative research with colleagues at ARS, and supervised joint graduate students.
- 1998-2002 **Assistant Professor**, Department of chemistry & Biochemistry, SDSU
- Coordinated efforts in department, college and institution committees
 - Continued efforts in curriculum development, recruiting undergraduate and graduate students, drug design, value added and bioenergy,
 - Co-PI on several research projects and advisor for undergraduate/honors and graduate students in academic and research activities.
 - Wrote several grant proposals, published articles in refereed journals and presented papers at national and international conferences.
- 1997-1998 **Assistant professor (visiting)**, Department of Chemistry & Biochemistry, SDSU.
- Developed new teaching materials for organic and biochemistry classes
 - Continued research projects in natural products chemistry, animal health and agrochemicals.

- 1996-7/1997. **Post-Doctoral Research Fellow**, Department of Chemistry and Biochemistry/
Department of Animal and range Science, South Dakota State University,
Brookings, SD 57007.
- Developed approaches to measure toxic compounds in leafy spurge. Continued efforts in natural products chemistry and agrochemical application.
- 1992-1995. **Associate Professor**, College of Pharmacy, University of Mansoura, Mansoura, Egypt.
- Coordinated efforts in department, college and institution committees, continued efforts in curriculum development, advised undergraduate and graduate students, developed new approaches in plant tissue culture for the production of natural products.
 - Developed value added products from industrial waste. Studied herbal medicine related to Egypt's flora.
- 1994 **Research Scientist (Chemist)** College of Agricultural Sciences, Department of Entomology and Applied Ecology, University of Delaware, Newark, DE 19717.
- Studied plant biochemical response to Ultra-Violet-B (UVB).
- 1990-1992 **Research Scientist (Chemist)**, College of Agricultural Sciences, Department of Entomology and Applied Ecology, University of Delaware, Newark, DE 19717.
- Established the identity of several cucurbitacin sources (including plant tissue culture) for cucurbitacin bait, which control cucumber beetle.
- 1989-1990 **Research Professor**, Department of Botany, University of Tennessee, Knoxville, TN 37996.
- Studied biosynthesis of phenolic acid derivatives and anthocyanins production by wild carrot tissue culture.
- 1987-1989 **Assistant Professor**, Department of Pharmacognosy, Faculty of Pharmacy, University of Mansoura, Mansoura, Egypt.
- Conducted studies in herbal medicine of Egypt and toxic metabolites.
- 1983-1987 **Graduate Research Assistant**, Department of Pharmaceutical Chemistry Welsh School of Pharmacy, University of Wales, Cardiff, Wales, U.K.
- Studied cucurbitacin biosynthesis and production by plant tissue culture
- 1978-1982 **Teaching and Research Assistant**, Department of Pharmacognosy, College of Pharmacy, University of Mansoura, Mansoura, Egypt.
- Studied anticancer diterpenes from *E. conyzoides*.

TEACHING EXPERIENCE:

- Graduate and undergraduate Organic and Medicinal Chemistry, Advanced Synthesis of Natural Products and Advanced Organic Chemistry classes for more than 25 years
- Computer modeling for Teaching Organic and Medicinal Chemistry (graduate)
- Structure Determination of Organic compounds (Spectroscopy, graduate)
- Computer-Aided Drug Discovery (graduate)
- Organic chemistry for chemistry, pharmacy and premedicine majors (undergraduate)
- Bioorganic chemistry for nursing majors

- Experience in using State-of-the-Art teaching technology such as hybrid learning and SoTL
- Experience in WebCT, D2L and similar software
- Experience in distance/online education

Current Curriculum Development:

- Development of laboratory experiments for Organic Chemistry. This includes project oriented laboratory experiments/green chemistry experiments integrated with molecular modeling.
- Development of computational chemistry laboratory for undergraduate/Honors and graduate classes. This includes computer set up and software, design new exercises and training for graduate students and faculty.
- Organic chemistry course design (Chem 326L Honors and Chem 328L Honors), Impacts of Organic Reactions Animation on Sophomore Organic Chemistry Teaching, Governor Award 2003.
- Development of Molecular Modeling Approaches in Drug Design (graduate class)

Current Students Advising

- Major graduate advisor (Ph.D. and MS) 8 students
- Visiting Research Scholar 2 Scientists
- Graduate Committee advisor/member 20 students
- Graduate faculty advisor/member 14 students
- Undergraduate (including Honors) 20 students
- Chemistry majors
- Premed advisor

RESEARCH AREAS OF EXPERTISE:

- Drug discovery programs, computational approaches and bioassay-guided separation.
- Spectroscopic analysis using UV, IR, MS and NMR & 2-D NMR.
- Organic synthesis, biosynthesis, biotransformation, separation, identification, and structure elucidation of natural products.
- Standardization, analysis and quality control studies for nutraceutical preparation and their interaction with traditional medicine
- Analytical techniques such as HPLC, GLC, HPLC-MS, GC-MS, AA, Gel electrophoresis, affinity chromatography and radiolabelled tracer analysis.
- Management of NMR facility.
- *In vitro* and *in vivo* studies in drug discovery such as antibacterial, antiviral, and anticancer
- Tissue culture production of natural products, selection of more productive or resistant cell lines, protoplasm fusion, cloning, and molecular biology techniques.
- Curriculum development including honors classes
- Strategic planning and accreditation processes

CURRENT RESEARCH GROUP:

2 postdoctoral fellows,

- 7 graduate students
- 5 undergraduate students

Leadership Experiences:

1. College of Arts & Science tenure and Promotion Committee
Mentored chemistry, pharmacy, pre-medicine and honors student in the classroom and undergraduate research
2. Managed and advised research projects for graduate and undergraduate students
3. Curriculum developments for undergraduate and graduate classes
5. Leadership in strategic planning
6. Leadership and consultant in university, departments and program accreditation processes
7. Community service and organizer for scientific meeting
8. Entrepreneurial, leadership in economic development

Community and Professional Leadership:

- Accreditation Expert Council
- Continuous efforts in chairing the Academic Department: A Workshop for Division and Department Chairs and Deans. American Council on Education
- Community development for Native Americans Economic development program through establishing nutraceutical industry at Sisseton Wahpeton, SD.
- Support of local community industry partnership and development through partnership with local industry.
- Brookings Community Leadership program and active member of Brookings Chamber of Commerce.
- Coordinated efforts for Value-Added group and SUN GRANT INITIATIVES at SDSU
- Coordinated efforts for establishing Complementary and Alternative Medicine (CAM) group at SDSU.
- Organized a Symposium “Natural Products” at ACS meeting
- Chaired departmental and campus committees
- Coordinated efforts for recruiting graduate and undergraduate students
- Supported many cultural activities and delivered many talks in the community

PROFESSIONAL ACTIVITIES AND HONORS:

- Leo Spinar Teaching Award of the year, Department of Chemistry and Biochemistry (2013-2014)
- Best presentation Award on the 2nd International Conference on Medicinal Chemistry & Computer Aided Drug Designing, Las Vegas, USA during October 15-17, 2013.
- SDSU Distinguished Research Award (2012)
- Chair of ACS- Sioux Valley Local section 2012
- University Academic Senate
- University Interfaith Council
- Academic Affair Committee
- Honorary Degree Committee

- Winner of Governor of South Dakota Award for Development of Teaching Technology and course design in organic chemistry for Honors classes (2003).
- Winner of undergraduate and graduate Joseph Nelson Scholarship for research at SDSU 2001 and 2002, 2004, 2005 and 2008
- Organized a Symposium “Natural Product Chemistry” at the American Chemical Society 35th Midwest Regional Meeting in St Louis, MO October 26-28, 2000.
- Organized a National Symposium in Egypt “Plants that Heal, Protect the Environment Too”, University of Mansoura, April 1995.

PROFESSIONAL ORGANIZATION MEMBERSHIP:

- American Chemical Society (ACS).
- American Association of Pharmaceutical Scientist (AAPS)
- American Association of College of Pharmacy (AACP)
- American Society of Pharmacognosy (ASP).
- Sigma XI
- International Society for Pest Information (ISPI)
- Brookings Chamber of Commerce
- * Rotary Club
- * South Dakota Council for World Affairs

Current Grant

1. USDA-NFA .A cooperative investigation comparing nutritional \$200,000 9/11-8/315 Characteristics of selected wild and domesticated Amelanchier cultivar (C0-PI 45% efforts). Collaboration Project with Fort Berthold Community College, ND.
2. NSF REU- PI- Dr. J. Rice, my role is investigator (with others) [\$479,869 (3/15-3-/18) Pending

Grant in preparation:

NIH-NCI- Design of Novel BRAF-MEK Inhibitors for the Treatment of Melanoma, Inspired from Cucurbitacin Natural Products (, ???-12/18)

SDSU Collaborator:

Dr. C. Dwivedi, Dr. P. Srinath, Dr. S. Rahman, Dr. Y. You, Dr. D. Raynie; Dr. D. Francis, Dr. N. Reese; Dr. F. Li, Dr. Bill Gibbons, Dr. Bruce Blakely, Dr. Gary Anderson, Dr. J. Julson, Dr. P. Krishnan and D. H. Woodard, Dr. R. McTaggart.

South Dakota Collaborators:

- Dr. Jason Peterson to study “FO and Synthesized Riboflavin Analogs: Potential Modulators of Biofilm Signaling in *Pseudomonas aeruginosa*”.
- Dr. Subhash C. Chauhan, Cancer Biology Research Center Sanford Research, Sioux Falls to study the mechanism of protein kinase inhibitor of drug candidate synthesized in our lab

- Dr. Meena Jaggi, Cancer Biology Research Center, Sanford Research to study the mechanism of prostate and ovarian cancer estrogenic inhibitors.

Current International Collaboration:

1. King Khaled University, Saudi Arabia
2. University of Mansoura, College of Science, Mansoura, Egypt.
3. Yunnan Normal University, China
4. University of Puerto Rico at Rio Peidras

National Collaboration

1. Dr. Magid AbouGarbia and Dr. Wayne Childers, Temple School of Pharmacy, Temple University, joint collaboration to study Novel Inhibitors of FMS Kinase for the Treatment of Metastatic Breast Cancer.
2. Dr. Brian Blagg, The University of Kansas, joint collaboration to study Hsp90 for controlling cancer proliferation.
3. DuPont Company. Potential Drug Candidates. Study of Cytisine Alkaloid Novel Synthetic Analogs as potential insecticidal activity.
4. Established a collaborative program with Dr. K. El-Sayed (LSU-Monroe) to study anticancer and anti-inflammatory activities of bio-transformed marine natural products.
5. Dr. Karel R. Schubert (Donald Danforth Plant Science Center, St. Louis University) to study cucurbitacin profiles and its correlation with genetic changes in cucurbits.
6. Dr. L. Alder at University for Massachusetts, Amherst to study the environmental and ecological of plants containing cucurbitacins
7. Dr. Thomas E. Juenger, Texas A&M for conducting analysis of cucurbitacins

Current Consulting Activities:

1. Drug Discovery and Nutraceuticals
2. Cucurbitacin analysis, Dr. L. Alder, University of Massachusetts Amherst
3. Processing of Natural Products from Algae. Bioavantis, Snoqualmie, WA.
4. Evaluation of heparin separation and processing, AKZO NOBEL, Inc.
5. Processing of cucurbitacin products, Florida Food Products, Inc.
6. Standardization of cucurbitacin Products, Bioglobe Inc, Australia

Patent:

1. **Cucurbitacin compounds.** Halaweish, Fathi T.; Bartalis, Judit. (South Dakota State University, USA). U.S. Pat. Appl. Publ. (2007), 26pp. CODEN: USXXCO US 2007099852 A1 20070503
2. **Cucurbitacin derivatives for use as anti-proliferative or hepatoprotective agents.** Halaweish, Fathi T.; Bartalis, Judit. (South Dakota State University, USA). U.S. Pat. Appl. Publ. (2007), 27pp. CODEN: USXXCO US 2007049538 A1 20070301 Patent written in English
3. **Three IP disclosure (pending, 2012)**_
 - a. **Novel Estrone and Cucurbitacins analogs for treatment of Prostate Cancer (T-00240)**
 - b. **Novel Drug candidate Targeting melanoma (00270)**
 - c. **Novel Cytisine Analogs for Nicotine Smoking Cession aid (T-00262)**
4. **Patent in Progress in Solid Acid catalysis for Bioenergy Conversion**

- a. **Novel solid acid catalysis for biodiesel production from waste grease and vegetable oil- OIPE-SN-13189918.**

Entrepreneurial Activities

1). Founded two new companies:

- “NatPro Pharmaceuticals” patent targeting hepatoprotective drug. SBIR and STTR proposals are currently in progress for this academic year
- “Renewable Bioenergy LLC” patent for biodiesel production using novel approach in solid phase catalysis, crude oil and yellow grease (waste oil). SBIR and STTR proposals are currently in progress for this academic year

2). Assisted Big Coulee District (Sisseton, SD) to establish local company for the production and marketing nutraceutical products generated from their current funding to research project in my group. Study for identification of other Native Americans herbal medicine for other product is in progress. We have identified a novel compound with **antibacterial effect** .

3) Promoted entrepreneurial education to my graduate students.

4) Work is in progress to file for three patents in my group this year.

Recently Funded Projects

1. Continued the fourth year of DOED (C0-PI), Graduate Assistance in Areas of National Need (GAAN), CFDA 84.200A (\$681,360, 7/10-6/13)
2. Continued the second year funding from SD-RCC (Co-PI, 25%) Center for Biological Control and Analysis By Applied Photonics (25% of \$4,295,769 (7/09 -6/14).
3. USDA-NFA, A cooperative investigation comparing nutritional Characteristics of selected wild and domesticated Amelanchier cultivar (C0-PI 25% efforts). Collaboration Project with Fort Berthold Community College, ND (25% of \$200,000 9/11-8/13
4. Funded graduate assistantship (Mr. Abdul Rahman Alsayari) from Saudi Arabia government for five years. The RA funds student’s stipend, benefits (~\$40,000) plus \$11,000/per year research and supplies expenses per year for five years.
5. Funded graduate assistantship (Mr. Mater Mahnashi) from Saudi Arabia government for five years. The RA funds student’s stipend, benefits (~\$40,000) plus \$12,000/per year research and supplies expenses per year for five years.
6. Funded graduate assistantship from Libyan government for two years. The RA funds student’s stipend, benefits (~\$40,000) plus \$11,000/per year research and supplies expenses per year.

Grants in Preparation for submission this year:

1. Halaweish, F., “Study of novel potential Raf-MEK inhibitors: Potential drug candidates for treatment of Melanoma”, NIH-R01 or R21 (submission date 10/2013, collaborator: Dr. AbouGarbia, M., and Childers, D., Temple University)
2. Halaweish, F., Cytosine Nicotine Cessation Analogs, NIH-R21 (\$320, 000) submission date 10/2013).
3. Halaweish, F., Novel Anti-estrogen drug candidates targeting breast, ovarian and prostate cancer, NIH-R03 (6.2013).

Presentations:

1. Halaweish, F.T., Selected Cucurbita Foetidissima cell lines of high cucurbitacin contents, 38th Annual meeting of ASP, Iowa City, July 26-30, 1997.
2. Halaweish, Fathi T., Kronberg, S. and Rice, J.A., Aversive Flavonoids from *E. esula*, 38th Annual meeting of the ASP, Iowa City, July 26-30, 1997.
3. Daoning, Z., and Halaweish, F.T., Ribosome-Inactivating Proteins from *C. foetidissima*, The 32nd Great lakes 2000 regional Meeting of the ACS, Fargo, ND, June 4-6, 2000 .
4. Huntimer, E., Halaweish, F. and Reese, N. Echinacea: Antioxidant activity and safety, 35th Midwest Regional Meeting of the ACS, October 25-27, 2000, St. Louis, MO.
5. Huntimer, E., Halaweish, F. and Khalil, A., Pregnane Glycosides from *C. retrospiciens*, 35th Midwest Regional Meeting of the ACS, October 25-27, 2000, St. Louis, MO.
6. Zhang, D. and Halaweish, D., Ribosome-Inactivating Proteins from *C. foetidissima*, 35th Midwest Regional Meeting of the ACS, Oct. 25-27, 2000, St. Louis, MO.
7. Zhang, D. and Halaweish, F.T., Ribosome–Inactivating Proteins from Cucurbita foetidissima, 32nd Great Lakes Regional Meeting ACS, June 4-6, 2000, Fargo, ND.
8. Hubert, M.B, Kronberg, S.L. and Halaweish, F.T., Potential degradation of leafy spurge toxins in cattle rumen digesta, Am. Soc. of Animal Sci., March 19-21, 2001.
9. Huntimer, E., Halaweish, F.T. and Reese, Neil, Examination of the antioxidant activity and safety of *E. Angustifolia*, South Dakota Academy of Science, April 6, 2001.
10. Halaweish, F.T., Kronberg, S. and Rice, J. A., Aversive Diterpenes of *Euphorbia Esula*, 222nd ACS national Meeting, August 26-30, 2001.
11. Zhang, D. and Halaweish, F.T., Ribosome-Inactivating Proteins from *Cucurbita Foetidissima* II, 222nd ACS national Meeting, August 26-30, 2001.
12. Halaweish, F.T., Tallamy, D., and Krischik, V., Biochemical response of Cucurbits to UV-B Stress. 222nd ACS national Meeting, August 26-30, 2001.
13. Agrawal, P., Maydew, B., Halaweish, F.T., and Dwivedi, C., Antiperoxidant effects of Resveratrol, 3rd Biennial Joint EPSCoR Conference, October 2, 2001.
14. Elliot, E. and Halaweish, F.T., Biochemical Response of Soybean to Ultraviolet-B Changes, 3rd Biennial Joint EPSCoR Conference, October 2, 2001.
15. Bartalis, Judit; Halaweish, Fathi T., Hepatoprotective and antitumor activities of cucurbitacins 223rd ACS National Meeting, Orlando, FL, April 7-11, 2002 .
16. Huntimer, Eric D.; Halaweish, Fathi T.; Reese, Neil R. Echinacea: antioxidant, anti-hyaluronidase and cytotoxic activities, 223rd ACS National Meeting, Orlando, FL, April 7-11, 2002 .
17. Zhang, D. and Halaweish, F.T., Ribosome-Inactivating Proteins (RIPs) and Trypsin Inhibitors from *Cucurbita Texana* 37th Midwest Regional Meeting of the ACS, October 21-25, 2002.
18. Agrawal, P., Halaweish, F.T., Dwivedi, C. Antiperoxidant Effects of Resveratrol, 37th Midwest Regional Meeting of the American Chemical Society, October 21-24, 2002.
19. Huntimer, E.D., and Halaweish, F.T. Chicoric acid: synthesis and identification in Echinacea root extract, 37th Midwest Regional Meeting of the American Chemical Society, October 21-24, 2002.
20. Krishnan, P.; Halaweish, F.T., Phenol Content \$Antioxidant Activity of Canola Grown in the N. Central Region. National Canola Conference, Washington D.C. Feb 5-8, 2003.
21. Krishnan, P. Halaweish, F.T., and Thudukurthy, D. 94th AOCS Annual Meeting, Total phenol content and antioxidant activity of canola grown in the North Central U.S, An

- invited paper for American Oil Chemists Society Annual meeting, May 4-7, 2003, Kansas City, Missouri, USA
22. Huntimer, E.D. and Halaweish, F.T. Determination of the Effect of *Echinacea angustifolia* Phenolics on the Proliferation of Cancer Cells, 226th ACS National Meeting, New York, NY, September 7-11, 2003.
 23. Krishnan, P. Halaweish, F.T., 2003 AACC Annual Meeting, September 28 - October 2, 2003. Portland, Oregon.
 24. Heitz, B., Singh, K., and Halaweish, F.T. Screening of Native American herbal Medicine for Biological Activities, 38th ACS Midwest regional meeting, Nov. 5-7, 2003.
 25. Bartalis, J. and Halaweish, F.T., Cucurbitacin Lipophilicity by Fast HPLC, 38th ACS Midwest regional meeting, Nov. 5-7, 2003.
 26. Huntimer, E. D., and Halaweish, F.T. Indirect Interference of *E. angustifolia* on Chemotherapy. 38th ACS Midwest regional meeting, Nov. 5-7, 2003.
 27. Huntimer, E. D. and Halaweish, F.T. Interference of *Echinacea angustifolia* on cancer chemotherapy, 228th ACS National Meeting, Philadelphia, PA, August 2004.
 28. Bartalis, J. and Halaweish, F.T., QSAR of cucurbitacin homologues using HepG2 cells and chromatographic hydrophobicity indexes; 227th ACS National meeting, March. 24-29, 2004.
 29. Yacoub, S., El Sayed, K., Huntimer, E.D., and Halaweish, F.T. Chemical and Microbial Transformations Studies of the Bioactive Marine Natural products Sipholane Triterpenes. International Congress on Natural Products Research, July 31- Aug. 4, 04, Phoenix, AZ.
 30. Singh, Y., Devkota, A.K., Sneed, C.D., Singh, K., and Halaweish, F.T., Hepatotoxicity potential of Saw Palmetto (*Serenoa repens*) in rats. 14th Annual Pharmacy Research Presentations & Keo Glidden Smith Fall Pharmacy Convocation, October 25, 2004.
 31. Singh, Y., Devkota, A.K., Sneed, C.D., Singh, K., and Halaweish, F.T., Hepatotoxicity potential of Saw Palmetto (*Serenoa repens*) in rats. EPSCoR meeting in Rapid City, October 11, 2004.
 32. Singh, Y., Devkota, A.K., Sneed, C.D., Singh, K. and Halaweish, F.T., Hepatotoxicity potential of Saw Palmetto (*Serenoa repens*) in rats. Experimental Biology 2005/XXXV Intern. Cong. Physiol. Sc., San Diego, March 31-April 5, 2005.
 33. ElSayed, K., Galal, A., Yacoub, S., Huntimer, E. and Halaweish F., Biocatalytic and Semisynthetic Optimization of the Antiangiogenic and Anti-inflammatory Marine Sipholane Tripterene. Am. Soc. Pharmacog., 46th Annual Meeting, Corvallis, Oregon, July 23-27, 2005.
 34. Huntimer, E. D., and Halaweish, F.T. Further Studies of the Adverse Events relating *Echinacea angustifolia* and Cancer Chemotherapy. 230th ACS National Meeting, Aug. 28-Sept.1, 2005, Washington DC.
 35. Halaweish, I.F., Cervantes, D., and Halaweish, F.T., Inhibition of Protein Glycation by Rutin's Metabolites. 230th ACS National Meeting, Aug. 28-Sept.1, 2005, Washington DC.
 36. Huntimer, E. D., and Halaweish, F.T. Further Studies of the Adverse Events relating *Echinacea angustifolia* and Cancer Chemotherapy. EPSCoR. September, 2005
 37. Halaweish, I.F., Cervantes, D., and Halaweish, F.T., Inhibition of Protein Glycation by Rutin's Metabolites. EPSCoR, September 9, 2005.
 38. Awad, S., Hassan, A.N., and Halaweish, F., Awad, A., Hassan, A. N., Application of exopolysaccharide-producing cultures in making reduced fat Cheddar cheese.

- Composition and proteolysis. American Dairy Science Association Annual Meeting. Cincinnati. July 24-28., 2005.
39. Young, A. J.; Riter, D; Halaweish, F. T.; New Cucurbitacin derivatives: Potential anticancer candidates.; 40th Midwest Regional ACS Meeting, Joplin, MO; 26th-30th October 2005.
 40. Gilbes, B. J.; Halaweish, F. T.; Estrone-to-Cucurbitane transformations.; 40th Midwest Regional ACS Meeting, Joplin, MO; 26th-30th October 2005.
 41. Bleakley, B.H., and F.T. Halaweish. 2005. Culture-based and microscopic examination of stored water and biofilm materials from two depths in the Homestake Mine, South Dakota. Abstract, p. 79. *In* Program and Abstracts of the Joint Symposia for Subsurface Microbiology (ISSM 2005) and Environmental Biogeochemistry (ISEB XVII). ASM, Washington, D.C.
 42. Bartalis, Judit; Halaweish, Fathi T., Cucurbitacin analogs protect HepG2 and HSC-T6 liver cell lines against cytotoxicity and proliferation, 231st ACS National Meeting, Atlanta, GA, March 26-30, 2006 (2006),
 43. Bartalis, Judit; Halaweish, Fathi T.. Influence of structural characteristics over the cytotoxic and hepatoprotective activities of cucurbitacin analogs, 231st ACS National Meeting, Atlanta, GA, March 26-30, 2006 (2006).
 44. Young, A. J.; Halaweish, F. T.; New Cucurbitacin derivatives: Potential anticancer candidates, 232nd ACS National Meeting San Francisco, September 10-14, 2006.
 45. Fahey, J., Young, A. J.; D; Halaweish, F. T.; New Cucurbitacin derivatives: Potential anticancer candidates. 41st Midwest Regional Meeting, October 25-27, 2006
 46. Javed, J., Cervantes, D., and Halaweish, F.T. Cucurbitacins role as potent advanced glycation end product inhibitors. 41st Midwest Regional Meeting, October 25-27 2006.
 47. Garry, J., Stuefen, C., Halaweish, F.T. Potential Nutraceutical Properties of *Amorpha Canescens* 41st Midwest Regional Meeting, October 25-27 2006
 48. Gilbes, Blanca J.; Halaweish, Fathi T. Studies Toward the Total Synthesis of Cucurbitacins, ACS National Meeting, San Francisco, CA, 10-14 Sep 2006
 49. Jensen, Jeremy; Halaweish, Fathi T, Studies of Echinacea on HeLa and MCF-7 Cancer Cell Lines, (ACS National Meeting, San Francisco, CA, 10-14 Sep 2006.
 50. Young, Andrew J.; Halaweish, Fathi T., Cucurbitacin Derivatives: Development of Potential Anticancer Candidates Via Computational Chemistry 42nd Midwest ACS Regional Meeting, Kansas City, MO, November 7-10 (2007),
 51. Jensen, Jeremy J.; Halaweish, Fathi T.; Huntimer, Eric. Total Novel Synthesis of the Echinacea Compounds Chicoric Acid and 1, 5-Dicaffeoylquinic Acid, 42nd ACS Midwest Regional Meeting, Kansas City, MO, November 7-10 (2007).
 52. Halaweish, Fathi T.; Mercer, Erin Jo; Geiger, Eric. Biodiesel Synthesis: ETS-10 as a Prospective Catalyst, 42nd ACS Midwest Regional, Kansas City, MO, November 7-10 (2007).
 53. Gilbes, Blanca J.; Halaweish, Fathi T., Progress toward the synthesis of cucurbitacins, 234th ACS National Meeting, Boston, MA, August 19-23, 2007.
 54. Jensen, Jeremy; Halaweish, Fathi T.; Chase, Christopher. Interference of Echinacea on cancer chemotherapy, 234th ACS National Meeting, Boston, MA, August 19-23, 2007 (2007).
 55. Gilbes, Blanca J.; Halaweish, Fathi T.; Visser, Jerry; Rosentrater, Kurt. Use of DDGS as a biocomposite layered fabrication material, 234th ACS National Meeting, Boston, MA, August 19-23, 2007 (2007).

56. Young, Andrew J.; Halaweish, Fathi T., Development of novel cucurbitacin derivatives through QSAR studies as anticancer candidates, 233rd ACS National Meeting, Chicago, IL, March 25-29, 2007 (2007).
57. Mercer, E. J., Halaweish, F., and Geiger. E., Biodiesel Synthesis via Titanium Niobate Nanosheet Catalysis, 43rd ACS Midwest Regional Meeting, Kearney, NE, October 8-11 (2008).
58. Erin Jo Mercer, Fathi Halaweish, and Eric Geiger. Biodiesel Synthesis via Titanium Niobate Nanosheet Catalysis, South Dakota EPSCoR State Conference, Sioux Falls, SD, September 11 (2008).
59. Fahey, J; Young, A. J.; Halaweish, F. Investigation of Cucurbitacin anti-hepatocellular carcinoma activity: The EGFR signaling pathway, 43rd ACS Midwest Regional, Kearney, NE, November 8-11 (2008).
60. Chase, J., Huntimer, E., Chase, C., Halaweish, F., Interference of Echinacea with Cytochrome P450, 43rd ACS Midwest Regional, Kearney, NE, November 8-11 (2008)
61. Huntimer, E. Sajja, R., Fahey, J., Rahman, S., Halaweish, F., Design of novel cytosine analogues for neuronal nicotinic acetylcholine receptors 43rd ACS Midwest Regional, Kearney, NE, November 8-11 (2008).
62. Young, A. and Halaweish, F., Encapsulation of Cucurbitacins within Lipid Microspheres as a Novel Drug Delivery System 43rd ACS Midwest Regional, Kearney, NE, November 8-11 (2008).
63. Rice, N., Young, J. Y., Fahey, J. and Halaweish, F., Cucurbitacins Anti-Prostate Cancer and Anti-Inflammatory Activities: Molecular Modeling Approach, 43rd ACS Midwest Regional, Kearney, NE, November 8-11 (2008)
64. Engle, K., Fahey, J., Ibrahim, A., and Halaweish, F., Phenolic Compounds and Antioxidant Activity of South Dakota Wheat Varieties, URMS, Morehead, MN, Oct.17-18, 2008.
65. Jacobsen, Ryan; Geiger, Eric; Halaweish, Fathi. Potentiometric Modification of Hydroxyl ASTM Method in Polyol Analysis. ACS Midwest Regional Meeting Kearney, NE, October 8-11 (2008).
66. Jacobsen, Ryan; Geiger, Eric; Halaweish, Fathi. Novel Synthesis of Polyol Using the Iron Tetra Amido Macrocyclic Ligand (TAML). ACS, 43rd Midwest Regional Meeting, Kearney, NE, United States, October 8-11 (2008),
67. Jacobsen, Ryan; Geiger, Eric; Halaweish, Fathi. Novel Synthesis of Polyol Using the Iron Tetra Amido Macrocyclic Ligand (TAML). South Dakota EPSCoR State Conference, Sioux Falls, SD, September 11 (2008).
68. Rieck, A., Rice, N., Fahey, J., Halaweish, F., Synthesis of Prenylated Flavonoids as Anticancer Drugs 44th ACS Midwest Regional Meeting, Iowa City, IA, October 21-24 (2009).
69. Lokken, J., Halaweish, F., Chase, C., Modulation of CYP3A4 by Echinacea, 44th ACS Midwest Regional Meeting, Iowa City, IA, October 21-24 (2009)
70. Abdul Al-Aal, H, Fahey, J. Halaweish, F., Food Preservative Activity of Phenolic Compounds in Orange Peel Extracts (*Citrus sinensis* L.), 44th ACS Midwest Regional Meeting, Iowa City, IA, October 21-24 (2009).
71. Taylor, J. Halaweish, F., Simulated Docking of Lobeline Analogues On the Neuronal Nicotinic Receptor Alpha 4 Beta 2, 44th ACS Midwest Regional Meeting, Iowa City, IA, October 21-24 (2009).

72. Gilbes, B., and Halaweish, F., Development of Novel Cucurbitanes From Synthetic Transformations On (+)-Estrone", 44th ACS Midwest Regional Meeting, Iowa City, IA, October 21-24 (2009).
73. Mercer, E., Ficek, D., and Halaweish, F. Biodiesel Synthesis via Titanium Niobate Nanosheet Catalysis, 4th Annual South Dakota Biotechnology Summit and Annual Meeting, Sioux Falls, SD, September 17 (2009)
74. Ficek, D., Glover, Karl, and Halaweish, F. and Glover, K., Phenolic Compounds and Antioxidant Activity of South Dakota Wheat Varieties, 44th Annual Midwest Regional, Iowa City, IA, October 21 - 24 (2009).
75. Mercer, E. and Halaweish, F., Determination of Free Glycerol by-Product in Biodiesel Production Via Solid Phase Extraction and Spectrophotometric Analysis with Anthrone Colouring Reagent", 44th Annual Midwest Regional, Iowa City, IA, October 21 - 24 (2009).
76. Mercer, E., Ficek, D., and Halaweish, F. Biodiesel Synthesis via Titanium Niobate Nanosheet Catalysis, South Dakota/Wyoming EPSCoR Meeting, Rapid City, SD, September 24 (2009)
77. Erin Mercer and Fathi Halaweish Development of a Recyclable Heterogeneous Catalyst for Biodiesel Synthesis Utilizing Waste Grease as Feedstock, EPA-National Center for Environmental research Expo, Washington DC, March 21-24, 2010
78. Sonia B. De la Torre-Melendez and Fathi Halaweish, Synthesis of cytsine analogues: potential nicotine cessation aid, 45th ACS Midwest Regional Meeting Wichita, KS, Oct. 27-30, 2010.
79. Joielisa Tyler, Fathi Halaweish, Refined Simulated Docking of Lobeline Analogues on the Neuronal Nicotinic Receptor $\alpha_4\beta_2$, 45th ACS Midwest Regional Meeting Wichita, KS, Oct. 27-30, 2010.
80. David G. Ficek, James Lokken, Fathi Halaweish, Study of proliferative mechanism and apoptotic interference of Echinacea preparation with chemotherapeutic agents, 45th ACS Midwest Regional Meeting Wichita, KS, Oct. 27-30, 2010.
81. Taylor Hietpas, Eric Huntimer, Fathi Halaweish, Synthesis of the Principal Apoptotically Inhibitive Compounds in Echinacea Preparations, 45th ACS Midwest Regional Meeting Wichita, KS, Oct. 27-30, 2010.
82. Kelly Wong, Jeff Fahey, Dr. Fathi Halaweish, Development of Cucurbitacins for the Treatment of Type 2 Diabetes, 45th ACS Midwest Regional Meeting Wichita, KS, Oct. 27-30, 2010.
83. Kelly Wong and Fathi Halaweish, Molecular modeling design of cucurbitacins analogs towards treatment of type 2 diabetes. 2010 SD-BRIN UGF convocation 7/27/2010 and Augustana College Poster Session (9/27/2010)
84. Mahmoud Salama, Mukulesh Baruah, and Fathi T. Halaweish, De-Novo synthesis of cucurbitane analogues: potential drug candidates for treatment of melanoma, 45th ACS Midwest Regional Meeting Wichita, KS, Oct. 27-30, 2010.
85. Abdulrhman Alsayari, Nichole Rice, Mukulesh Baruah, Fathi Halaweish, Study of Novel Estrogen and Cucurbitane Analogs Affinity and Cytotoxicity Toward Breast Cancer Cell Lines, 45th ACS Midwest Regional Meeting Wichita, KS, Oct. 27-30, 2010.
86. David P. Cartrette; Jessica Goerd; Fathi Halaweish, Use of Digital Visualization Tools in the Organic Chemistry Lab, 45th ACS Midwest Regional Meeting Wichita, KS, Oct. 27-30, 2010

88. James Lokken, Chris Chase and Fathi Halaweish, Effects of St. John's Wort extracts on the metabolism of anti-inflammatory and anti-hypertensive agents via cytochrome P450 3A4 inhibition, AAPS Annual Meeting, New Orleans, LA, Nov 14-18, 2010.
89. James Lokken, Chris Chase and Fathi Halaweish, Effects of Echinacea Extracts on the metabolism of anti-inflammatory and anti-hypertensive agents via cytochrome P450 3A4 inhibition, AAPS Annual Meeting, New Orleans, LA, Nov 14-18, 2010.
90. Sajja, R., Huntimer, E., Halaweish, F., and Rahman, S., Design and synthesis of Novel cytosine analogs for pharmacotherapy of drug addiction. AAPS Annual Meeting, New Orleans, LA, Nov 14-18, 2010.
91. Nichole Rice, Mukulesh Baruah, Halaweish, Fathi, Cucurbitane and estrone analogs: Targeting AR, HSP90, COX II, NF-kB, and iNOS receptors for prostate cancer treatment, 241st ACS National Meeting, Anaheim, CA, March 27-31, 2011
92. Abdul Rhaman Alsyari, Mukulesh Baruah, Halaweish, Fathi. Novel Cucurbitane and Estrone analogs for treatment of breast cancer, 241st ACS National Meeting, Anaheim, CA, March 27-31, 2011
93. De la Torre-Melendez, Sonia B.; Halaweish, Fathi, Potential drug candidates toward smoking cessation, 241st ACS National Meeting, Anaheim, CA, March 27-31, 2011
94. Karki, D., Glover, K., Fahey, J. Halaweish, F., and Ibrahim, A., Phenolic content and antioxidant activity in South Dakota wheat lines. ASA-CSSA-SSSA International Annual meeting, San Antonio, TX, Oct. 16-19, 2011.
95. Salama, M. and Halaweish F., Design and development of cucurbitacin analogs inhibiting MAPK pathway cascade for the treatment of melanoma, 244th ACS National Meeting that will be held in Philadelphia, Pennsylvania, August 19-23, 2012.
96. De La Torre-Melendez, S. and Halaweish, F. In silico study approach for the synthesis of cytosine analogs targeting the $\alpha_4\beta_2$ nAChR, 244th ACS National Meeting that will be held in Philadelphia, Pennsylvania, August 19-23, 2012.
97. Arjabi, H., and Halaweish, F., Investigation onto the mechanism behind the hepatoprotective effect of cucurbitacin compounds". American Society of Pharmacognosy-ICNPR, July28-August1, 2012, NY, NY.
98. Alsyari, A., Darweesh, M., Halaweish, F., Chase, C., American Anti- Bovine Viral Diarrhea Virus Activity Of Cucurbitacins As New Potential Antiviral Agents. American Society of Pharmacognosy-ICNPR, July 28th –August 1st, 2012, NY, NY.
99. Adam L. Pay, Lucas C. Kopel, Mahmoud S. Ahmed and Fathi T. Halaweish Design and Synthesis of Estrone Analogues Towards Treatment of Prostate and Breast Cancer, 47th ACS Midwest Regional Meeting, Omaha, NE Oct. 20-25, 2012.
100. Tyler L. Carlson, Lucas C. Kopel, Mahmoud S. Ahmed and Fathi T. Halaweish In Silico Design and Synthesis of Estrone Analogues Targeting the Androgen and Estrogen Receptor, 47th ACS Midwest Regional Meeting, Omaha, NE Oct. 20-25, 2012.
101. Keeli J. Eberhart, K. Hartmann and F.T. Halaweish* Evaluation of Chemopreventive Contents of Native American Juneberries (*Amelancier sp.*), 47th ACS Midwest Regional Meeting, Omaha, NE Oct. 20-25, 2012.
102. Lucas C. Kopel, Fathi T. Halaweish, Selective oxidation of the C2 hydroxyl of cucurbitacins via a Saegusa oxidation. 47th ACS Midwest Regional Meeting, Omaha, NE Oct. 20-25, 2012.

103. Adam L. Pay, Lucas C. Kopel, Mahmoud S. Ahmed and Fathi T. Halaweish
Design and Synthesis of Estrone Analogues Towards Treatment of Prostate and Breast Cancer, ACS-Sioux valley Local Section, Sioux Fall, SD, October 27, 2012.
104. Tyler L. Carlson, Lucas C. Kopel, Mahmoud S. Ahmed and Fathi T. Halaweish In Silico Design and Synthesis of Estrone Analogues Targeting the Androgen and Estrogen Receptor. ACS-Sioux valley Local Section, Sioux Fall, SD, October 27, 2012.
105. Salama, M. and Halaweish F., Design and development of cucurbitacin analogs inhibiting MAPK pathway cascade for the treatment of melanoma, SD Biotech. Summit, October 25th, 2012, Sioux Falls, SD.
106. Nichole Rice, Mukulesh Baruah, Halaweish, Fathi, Cucurbitane and estrone analogs: Targeting AR, HSP90, COX II, NF-kB, and iNOS receptors for prostate cancer treatment; Cancer Biology Symposium, August 30th, 2012, Sanford research, Sioux Fall, SD.
107. Abdulrhman Alsayari, Lucks C. Kopel, Fathi Halaweish*, Development of novel antiestrogenic estrone analogs targeting breast cancer, 2nd Inter. Conf on Med Chem & Computer Aided Drug Designing, Las Vegas, USA during October 15-17, 2013.
108. Ahmed, Mahmoud S.; Kopel, Lucas; Halaweish, Fathi T, Design, synthesis, and biological evaluation of novel estrone analogs targeting MAPK pathway for the treatment of melanoma, 245th ACS National Meeting & Exposition, New Orleans, LA, United States, April 7-11, 2013 (2013), MEDI-302.
109. Adam L.; Kopel, Lucas C.; Ahmed, Mahmoud S, Halaweish, Fathi T. Directed synthesis of estrone analogs targeting the estrogen receptors via in silico drug design, 48th Midwest Regional Meeting of the American Chemical Society, Springfield, MO, United States, October 16-19 (2013), MWRM-95.
110. Jessica A. Hall, Sahithi Seedarala, Lucas Kopel, Fathi Halaweish, Brian S. J. Blagg; Cucurbitacins as novel inhibitors of hsp90 chaperone function, MIKI, UIC, April 11-13, 2014.
111. *Jessica A Hall, Sahithi Seedarala¹, Nichole Rice, Lucas Kopel, Fathi Halaweish, Brian S. J. Blagg.* Cucurbitacins as novel inhibitors of Hsp90 chaperone function, 248th ACS National Meeting, August 10-14, 2014, San Francisco, CA.
112. Nasreldin, Ranna; ElSenduny, Fardous; Alsayari, Abdulrhman; Halaweish, Fathi T. Chemosensitization of Drug-Resistant Ovarian Cancer Cells with Hexanor-Cucurbitacin D, Undergraduate Research Scholarship and Creative Activity Day, Brookings, SD, United States, April 21 (2014).
113. Nasreldin, Ranna; ElSenduny, Fardous; Alsayari, Abdulrhman; Halaweish, Fathi T. Chemosensitization of Drug-Resistant Ovarian Cancer Cells with Hexanor-Cucurbitacin D, South Dakota Undergraduate Research Symposium, Pierre, SD, United States, July 25 (2014).
114. Atkinson, Jeremiah J.; Kuschel, Lauren M.; Kopel, Lucas C.; Ahmed, Mahmoud S, Halaweish, Fathi T. Synthesis of Indole-2-Carboxylic Acid Derivatives as Antagonists of Mutant BRAF Receptors in Melanoma, Undergraduate Research Scholarship and Creative Activity Day, Brookings, SD, United States, April 21 (2014).
115. Atkinson, Jeremiah J.; Kuschel, Lauren M.; Kopel, Lucas C.; Ahmed, Mahmoud S, Halaweish, Fathi T. Synthesis of Indole-2-Carboxylic Acid Derivatives as Antagonists of Mutant BRAF Receptors in Melanoma, Upper Midwest Honors College Conference, Waverly, IA, United States, April 24-26 (2014).

116. Atkinson, Jeremiah J.; Kuschel, Lauren M.; Kopel, Lucas C.; Ahmed, Mahmoud S, Halaweish, Fathi T. Synthesis of Indole-2-Carboxylic Acid Derivatives as Antagonists of Mutant BRAF Receptors in Melanoma, South Dakota Undergraduate Research Symposium, Pierre, SD, United States, July 25 (2014).
117. Gunawardana, S; Halaweish, Fathi T; Hartman, K. Assessment of Chemopreventive Contents of Native American Juneberries (*Amelancier sp.*), REU Research Symposium, Pierre, SD, United States, July 25th (2014).
118. Mater, Mahnashi; Halaweish, Fathi T, Design, synthesis, and biological screening of novel estrone analogs towards targeting hepatocellular carcinoma 49th ACS Midwest regional Meeting, Columbia, MO, United States, November 12-15, 2014.
119. Gunawardana, S; Halaweish, Fathi T; Hartman, K.; Study of Chemopreventive Activity of Native American Juneberries (*Amelancier sp.*), 49th ACS Midwest Regional Meeting, Columbia, MO, United States, Nov 14th (2014).
120. Jessica Taylor, Dr. Lucas Kopel, Dr. Mahmoud Salama, Fardous Elsenduny, Fathi Halaweish, Biological Study of Estrone-Analogue Cucurbitacin-Like Compounds Against Melanoma, 49th ACS Midwest Regional Meeting, Columbia, MO, United States, Nov 14th (2014).
121. Fardous ElSenduny, Farid Badria, Ahmed El-Waseef, Eduardo A. Callegari and Fathi T. Halaweish; Proteomic analysis of cucurbitacin B-sensitized cisplatin-resistant ovarian cancer cells, 49th ACS Midwest Regional Meeting, Columbia, MO, United States, Nov 14th (2014).
122. Fardous F. El-Senduny, Farid A. Badria, Ahmed M. Elwaseef, Fathi Halaweish, A novel approach for chemosensitization of cisplatin-resistant ovarian cancer by cucurbitacin B; 49th ACS Midwest Regional Meeting, Columbia, MO, United States, Nov. 14th (2014).
123. Jeremiah J. Atkinson, Fardous F. ElSenduny, Lucas C. Kopel, Mahmoud S. Ahmed, and Fathi Halaweish; Biological Activity Testing of Novel Estrone Analogs for Targeted Pancreatic Cancer Treatment; 49th ACS Midwest Regional Meeting, Columbia, MO, United States, Nov. 14th (2014).
124. Nasreldin, R; ElSenduny, F.; Elgazwi, S.; Alsayari, A. ; Salama, M. ; Kopel, L.; Halaweish, F.; Biological Screening of Hexanor-Cucurbitacin D and Estrone Analogs against Ovarian Cancer Cells, Upper Midwest Regional Honors Conference, Mankato, MN, United States, March 26-28 (2015)

Publications

1. Balabathula, P.; Swathi A.; Zafar, N.; Thompson, P.; Ellis, R. T.; **Halaweish, F.**; Chauhan, S., JAGGI, M; Khan, Sheema S.; Chauhan, N., Nanoparticle formulation of ormeloxifene for pancreatic cancer, *Biomaterials*, Vol 53, 731-743, 2015
2. Hall, J.; Rice, N.; kopel, l.; **Halaweish, F.**; Blagg, B., Cucurbitacin D is a disruptor of the hsp90 chaperone machinery, *Journal of Natural Products, J. Nat. Prod.*, March 10, 2015.
3. Diane M. Maher, Sheema Khan, Jordan L. Nordquist, Mara C. Ebeling, Nichole A. Bauer, Lucas Kopel, Man Mohan Singh, **Fathi Halaweish**, Maria C. Bell, Meena Jaggi, Subhash C. Chauhan; Ormeloxifene efficiently inhibits ovarian cancer growth, *Cancer Letters*, vol 356 (2), 606–612, 2015
4. Mahmoud S. Ahmed, Lucas C. Kopel, and **Fathi Halaweish**, Structural Optimization and Biological Screening of a Steroidal Scaffold Possessing Cucurbitacin-Like Functionalities as B-Raf Inhibitors, *ChemMedChem*, 9, 1361-1369, 2014.

5. Galal H. Elgemeiel, Nahed M. Fathy, Ayman B. Farag, Ossama M. El-Badry, Ghaneia S. Hassan, Kamelia M Amin and **Fathi Halaweish**, Design, Synthesis and In vitro Anti-tumor Evaluation of Novel Acrylohydrazide Thioglycosides; *Med. Chem.* 4 (4), 400-406, 2014
6. Lucas, K., Salama, K. and **Halaweish, F.**, Synthesis of Novel Estrone Analogs by Incorporation of Thiophenols via Conjugate Addition to an Enone Side Chain, *Tetrahedron. Steroids*, 78, 1119-1125, 2013.
7. Salama, M. Ahmed and **Halaweish, F.**; Cucurbitacins: Potential Candidates Targeting Mitogen Activated Protein Kinase Pathway for Treatment of Melanoma; *Journal of Enzyme Inhibition and Medicinal Chemistry*, Early Online: 1–6 ISSN: 1475-6366 (print), 1475-6374 (electronic), 2013.
8. David Karki, Karl D. Glover, Jeff Fahey, **Fathi T. Halaweish** and Amir M. H. Ibrahim A.; Variability and Heritability of Grain Extracts in Spring and Winter Wheat grown in South Dakota. *Journal of Crop Improvement*, 27(5), 547-560, 2013.
9. Baruah, M., Huntimer, E., Salama M., Hoppe, A., and **Halaweish, F.**, Selective BODIPY® Based Fluorescent Chemosensor for Imaging Pb²⁺ Ion In Living Cells, *Tetrahedron Letters*, 53, 4273-4275, 2012
10. Kathleen A. Gibson, R. Neil Reese, Fathi T. Halaweish, Yulin Ren, Isolation and Characterization of a Bactericidal Withanolide from *Physalis virginiana*, *Pharmacology Magazine* 8, 22-28, 2012.
11. Bartalis, J., and **Halaweish, F.**, In vitro and QSAR Studies of Cucurbitacins on HepG2 and HSC-T6 Liver Cell Lines; *J. Bioorganic & Medicinal Chemistry*, 19 (8): 2757-66. 2011.
12. Mercer, E. and **Halaweish, F.**; Determination of Free Glycerol in Biodiesel via Solid Phase Extraction and Spectrophotometric Analysis; *Journal of the American Oil Chemists' Society*, Vol: 88, 5, 655-659, 2011
13. Abd El-aal, H. A., Halaweish, F.; Food preservative activity of phenolic compounds in orange peel extracts (*Citrus sinensis* L.), *L. Sci.* 53 (15) 233-240, 2011.
14. Mercer, E. and **Halaweish, F.** "Biodiesel synthesis via recyclable heterogeneous catalyst: titanium niobate nanosheet", and *Journal of ASTM International*, 7 (3), 1-6, 2010.
15. Javers, J. E., Gibbons, W.R., Halaweish, F., and Raynie, D.E., "Isolation of Medium Chain Length Polyhydroxyalkanoates from *Pseudomonas resinovorans* by Ethanol-Modified Supercritical Fluid Extraction," submitted to *Journal of the American Oil Chemists' Society*. (in review/accepted)
16. Jain, Sandeep; Shirode, Amit; Yacoub, Shenouda; Barbo, Ashley; Sylvester, Paul W; Huntimer, Eric; Halaweish, Fathi; El Sayed, Khalid, Biocatalysis of the anticancer sipholane triterpenoids, *Planta Medica*, 73(6):591-6. 2007.
17. Zhang, Daoning; Halaweish, Fathi T, Isolation and characterization of ribosome-inactivating proteins from, Cucurbitaceae., *Chemistry & biodiversity*, 4(3):431-42, 2007.
18. Agrawal, P., Halaweish, F and Dwivedi, C., Antioxidant effects and drug interactions of resveratrol present in wine. *J. Wine Res.*, 18 (2), pp 59-71, 2007.
19. Cervantes-Laurean D, Schramm DD, Jacobson EL, Halaweish I, Bruckner GG, Boissonneault GA. Inhibition of advanced glycation end product formation on collagen by rutin and its metabolites. *J Nutr Biochem.*, Aug;17(8):531-40, 2006.

20. Huntimer, E., Halaweish, F.T., and Chase, C., Proliferative Activity of Echinacea angustifolia Root Extracts on Cancer Cells: Interference with Doxorubicin Cytotoxicity. *Chemistry & Biodiversity* (*Hel. Chim. Acta), 3, 695-703, 2006.
21. Singh, Y., Devkota, A.K., Sneed, C.D., Singh, K. and Halaweish, F.T., Hepatotoxicity potential of Saw Palmetto (*Serenoa repens*) in rats. *Phytomedicine*, 14(2-3):204-8, 2007
22. Chen, Ye-Gao; Song, Xiao-Ping; Hai, Li-Na; Lv, Yu-Ping; Fang, A; Halaweish, F; Liao, Xin-Rong, Compounds with DNA cleaving activity from *Kadsura ananosma*, *Die Pharmazie*, 2006 Oct, 61(10): 891-2.
23. Vukovich, M. Halaweish, F.T., Ballard, T., Stevermer, S., Agrawal, P., Naringin does not alter caffeine pharmacokinetics, energy expenditure, or cardiovascular hemodynamics in humans following caffeine consumption *Clinical and Experimental Pharmacology and Physiology*. 33, 310-314, 2006.
24. Scott L. Kronberg, Mindy B. Hubert, Fathi T. Halaweish, and Paul J. Weimer., Interactions Between Cattle and Goat Rumen Microbes and *E. esula* Toxins. *J. Chem. Ecol.* 32 (1), 15 – 28, 2006.
25. Bartalis, J, and Halaweish, F.T., Relationships between cucurbitacins reversed-phase high-performance liquid chromatography hydrophobicity index and basal cytotoxicity on HepG2 cells, *J. Liq. Chromatog. B.*, 818 (2), 159-166, 2005.
26. Awad, S., Hassan, A.N., and Halaweish, F., Application of Exopolysaccharide-Producing Cultures in Reduced-Fat Cheddar Cheese Composition and Proteolysis. *J. Dairy Sci.*, 88, 4195-4203, 2005.
27. Chen, Ye-Gao; Wu, Zheng-Cai; Gui, Shi-Hong; Lv, Yu-Ping; Liao, Xin-Rong; Halaweish, Fathi, Lignans from *Schisandra henyi* with DNA cleaving activity and cytotoxic effect on leukemia and Hela cells in vitro, *Fitoterapia*, 76(3-4):370-3, 2005
28. Ye-Gao Chen, Li-Na Hai, Xin-Rong Liao, Guo-Wei Qin, Yu-Yuan Xie, Halaweish, F.T., Ananosic acids B and C, Two New 18 (13→12) Abeo Lanostane Triterpenoid from *Kadsura anaosma*. *J. Nat. Prod.*, 67, 875-877, 2004.
29. Huntimer, E., Halaweish, F.T. and Khalil, A., Polyoxypregnane Glycosides from *Carollima retrospectiva* I, *Phytochemical Analysis*. 15 (3), 141-211, 2004.
30. Zhang, D. and Halaweish, F.T., Isolation and Identification of Foetidissimin: A Novel Ribosome-Inactivating Proteins from *Cucurbita foetidissima*, *Plant Sc.*, 164, 387-393, 2003..
31. Halaweish, F.T., Rice, J.A. and Kronberg, S., New Aversive Flavonoids from *Euphorbia esula*, *J. Chem. Ecol.*, 29 (5), 1049-1058, 2003.
32. Zhao, C., Liu, Q., Halaweish, F.T. Dai, J., Weimin Zhao, W., Copacamphane, Picrotoxane and Alloaromadendrane Type Sesquiterpene Glycosides from *Dendrobium moniliforme*, *J. Nat. Prod.* 66 (8) 1140-1143, 2003.
33. Halaweish, F. T., Ye-Gao Chen, Zheng-Cai Wu, Yu-Ping Lu, Shi-Hong Gui, Jin Wen, Xin-Rong Liao, Li-Ming Yuan, Cytotoxic Triterpenoids from *Schisandra henryi*, *A. Arch Phram Res.* 26, 912-916, 2003.
34. Halaweish, F.T., Rice, J.A. and Kronberg, S., Toxic and aversive diterpenes from *Euphorbia esula*, *J. Chem. Ecol.*, 28, 1599-1611, 2002.
35. Muthukumarappan, K., Halaweish, F., and Naidu, A.S.; Ozone, In: *Natural Food Antimicrobial Systems*; Naidu, A.S. (Ed), CRC Press, pp 783-8000, 2000.
36. Abel-Halim, O.B., Abel-Fattah, H.A., Halaweish, F.T., and Halim, A.F.; Isoflavonoids and Alkaloids from *Spartidium saharae*, *Nat. Prod. Sci.*, 6, 198-192, 2000.

37. Afifi, M.S., Ross, S.A., ElSohly, M.A., Naeem, Z.E., and Halaweish, F., Cucurbitacins of *Cucumis prophetarum* SSP, J. Chem. Ecol., 25, 4, 1999.
38. Halaweish, F.T, Tallamy, D.W, and Santana, E, Cucurbitacins: A Role in Cucumber Beetle Steroid Nutrition, J. Chem. Ecol, 25, 2373-2383, 1999.
39. Halaweish, F.T., Tallamy, D.W., Production of Cucurbitacins by Cucurbit Cell Cultures, Plant Science, 131, 209-218, 1998
40. McCloud, E.S., Tallamy, D.W, and Halaweish, F.T., Squash Beetles Trenching Behavior: Avoidance of Cucurbitacin Induction or Mucilaginous Plant Sap?, Ecological Entomology, 20, 51–59, 1995.
41. Tallamy, D.W., and Halaweish, F.T., The effects of age, reproductive activity, sex and prior exposure on sensitivity to cucurbitacins in Southern root worm (Coleoptera: Chrysomelidae). Environmental Entomology, 22 (10), 925–932, 1993.
42. Halaweish, F.T., Cucurbitacins from *Cucurbita texana*: Evidence for the role of Isocucurbitacins. Journal of Chemical Ecology, 19, 29–37, 1993.
43. Halaweish, F.T, and Tallamy, D.W., A new cucurbitacins profile for *Cucurbita andreana*: A candidate for cucurbitacins tissue culture. J. Chem.Ecol., 19, 1133–1139, 1993.
44. Halaweish, F.T. and Tallamy, D.W., Quantitative determination of cucurbitacins by high performance liquid chromatography and high performance thin layer chromatography. Journal of liquid chromatography, 16, 491–511, 1993.
45. Halaweish, F.T., Gohr, A.A., and Halim, A.F., Induction of in-vitro culture of *Convolvulus arvensis* (L). Mansoura Journal of Pharmaceutical Sciences, 8, 47–55, 1992.
46. Johnson, R., Halaweish, F.T., and Fuhrmann, F., Analysis of Atrazine and associated metabolites by reverse-phase high performance thin layer chromatography, Journal of Liquid Chromatography, 15, 2941–2957, 1992.
47. El-Sharkawy, S., Selim, M., Afifi, M.S and Halaweish, F.T., Microbial transformation of zearalenone to zearalenone sulphate, Appl. Environ. Micro., Feb., 549–552, 1991.
48. Halaweish, F.T. and Dougall. D., Sinapoyl glucose synthesis by extracts of wild carrot cell cultures, Plant Science, 71, 179 –184, 1990.
49. Bohlmann, F., Balbaa, S. I., Halim, A., Halaweish, F. T., A terpene-coumarin derivatives from *Ethulia conyzoides*, Phytochemistry, 20, 177–178, 1981.
50. Balbaa, S. I., Halim, A. F., Halaweish, F.T., Constituents of the areal parts of *Ethulia conyzoides*, Fitoterapia, 52, 75–76, 1981
51. Halaweish, F. T. and Brain, K.R., Isocucurbitacins in *Bryonia dioica*; proceeding of the Phytochemical Society of Europe symposium, Lousane, Switzerland; Sep., 1986.
52. Halaweish, F. T. and Brain, K.R., A Naturally Occurring Isocucurbitacins in *Bryonia dioica* Root and Tissue Cultures; Proceeding of the first British–Egyptian Pharmaceutical symposium, Alexandria, Egypt, Sep., 1988.
53. Halaweish, F.T., Balbaa, S. I., Halim, and Bohlmann, F., New 5-methylcoumarin derivatives from *Ethulia conyzoides*, Phytochemistry, 19, 1519–1522, 1980.

Manuscripts in review:

1. El-Senduny, F.; Badria, F., Elwaseef, A., Chauhan, S., Halaweish, F., A novel approach for chemosensitization of cisplatin-resistant ovarian cancer by cucurbitacin B. Journal of Ovarian Cancer (in review).
2. Lokken, J., Chase, J. and Halaweish, F., Effects of Echinacea Extracts on the metabolism

of anti-inflammatory and anti-hypertensive agents via cytochrome P450 3A4 inhibition, J. Food and Chemical Toxicity (Submitted)

Manuscript in preparation:

1. Rice, N., Baruah, M., and Halaweish, F. Novel cucurbitacins and (+) estrone analog drug candidate towards prostate cancers, J. Med. Chem. Letters
2. Lokken, J., Chase, C., and Halaweish, F., Effects of St. John's Wort Extracts on the metabolism of anti-inflammatory and anti-hypertensive agents via cytochrome P450 3A4 inhibition.
3. Javed, J., Halaweish, S., Young, Y., Cervantes-Laurean, D., and Halaweish, F., Potential of Cucurbitacins in Treatment of Diabetes Complications. *Planta Medica* (Re-submitted).
4. Huntimer, E., Chase, C., Halaweish, F.T., Indirect Interference of Echinacea angustifolia Root Extract on the Chemotherapy of Doxorubicin and Hyaluronidase, Natural products reports (re-submitted).
5. Ren, Y., and Halaweish, F., Antibacterial activity of phenantherene and procyanidine from *Amorpha canescens* pursh. *Planta Medica* (on hold by Big Coulee District)
6. Ren, Y., and Halaweish, F., In vitro evaluation and structure activity relationship of flavonoids and their acetate with potential anti-proliferative activity. *Bioactive Natural Products*. (on hold by Big Coulee District).
7. Ren, Y., and Halaweish, F., Structure Activity relationship of lead plant antioxidant flavonoids effects. *Journal of American Food Chemistry* (on hold Big Coulee District).

Recent Invited Speaker:

1. Future University, Cairo, Egypt, February 9-12, 2105.
2. Sanford-SDSU Symposium, "In Silico and Biological Studies of Drug Candidates for Treatment of Liver, Melanoma, Prostate and Breast Cancers", 6/2012
3. National Annual Meeting for Native American's Indian Health Service, Rapid City, SD 7/26-7/29, 2010
4. Cucurbitane and Androgen Drug Candidates for Treatment Prostate and Hepatocellular Carcinoma, Avera McKennan Research Center, October 5th, 2010.
5. Successful cases Drug Discovery from Natural products, SD-BRIN faculty retreat, Chamberlain, SD September 24-25, 2010.
6. Biodiesel synthesis from waste grease, Sigma XI, Brookings, SD December 3, 2010
7. Potential Chemotherapeutic Agent for treatment of prostate cancer, Avera McKennan Cancer research Institute, June 3, 2008.
8. Drug Discovery from Natural products, UW-Stout, January 25, 2008.
9. Case Study of Drug Discovery From Natural products, MSU, October 29, 2007.
10. Natural Products: Potential products for pharmaceuticals and agrichemicals, SWMN, October 26, 2007.
11. Drug Discovery from Natural Products, Dona College, Nebraska, November 28th, 2006.
12. Interaction of Herbal/Nutraceuticals with Traditional medicine, Augustana College, Sioux Falls, SD, November 10th, 2006.
13. Interaction of Echinacea with Chemotherapy, Mayo Clinic, Rochester, MN June 12th, 2006.
14. Natural Products in Drug Discovery, University of Nebraska Omaha, October, 14th, 2005.

15. Cucurbitacins: Hepatoprotective and Anticancer Candidates, Lee Moffitt Cancer Research Institute, University of South Florida, August 1st, 2005.
16. Biting On Natural Products for Drug Discovery, University of South Dakota, March 24th, 2005.
17. Natural products in Drug Discovery, University of Minnesota Moorhead, December 2nd, 2004.
18. Natural Products in Drug Discovery, University of North Dakota, December 3rd, 2004.
19. Halaweish, F., Cucurbitacins: Availability and future production, USDA-Corn Rootworm Areawide Management Program, San Antonio, TX, October 24-26, 2000.
20. Halaweish, F., Analysis of cucurbitacins bait, Florida Food Products, Inc., November 13th, 2001.
21. Cucurbitacins Biological Activities, Yunnan Normal University, Kunming, Yunnan Province, China, June 23rd, 2002.