

Curriculum Vitae Outlines

Nada H. Saab-Ismail, Ph.D.; M.A.T.; M.Ed.

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Youtube: [nada saabismail](#)

EDUCATION ([view](#))

Michigan Administrator Certificate (June 2020)

Ph.D. in Medicinal Chemistry (1994, GPA = 3.6)

M.A.T.: Master of Art in Teaching (2006, GPA = 3.6)

M.Ed.: Master of Educational Studies (2011, GPA = 3.95)

IB, DP: International Baccalaureate Diploma Program (2011)

Professional Education Certificate, Secondary (Chemistry, Physics, Arabic)

Certification to Teach AP Chemistry and AP Physics.

SCHOLASTIC PERFORMANCE ([view](#))

EDUCATIONAL INSTITUTIONS ([view](#))

Wayne State University

Oakland University

University of Michigan-Dearborn

Henry Ford Community College

University of Tennessee-Memphis

University of Alabama at Birmingham

Detroit Public Schools

Wayne Regional Educational Service Agency

Dearborn Public Schools

Hamadeh Educational Services

PROFESSIONAL EXPERIENCE ([view](#))

Director of Arabic and Science Programs (K-12)

Teacher (9- 20): Chemistry, Physics, Biochemistry, Arabic Language

Researcher; Medicinal Chemistry, synthesis of anticancer agents, cardiac specific contrast agent, insulin independent diabetic treatment

Reviewer for Michigan Student Test of Educational Progress (M-STEP)

Coach for Formative Assessment for Michigan Educators (FAME)

Bilingual Facilitator (Kg-12)

Online Physics Teacher (Cyber High School)

Translation: English to Arabic, Arabic to English

SCIENTIFIC PUBLICATION RECORD ([view](#))

1 Online Physics Course- Physics by Saab ([view](#))

2 Online Chemistry Courses ([view](#))

12 Journal Articles

15 Abstracts in National and International Scientific Meetings

USA Patent

Curriculum Vitae

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313-258-0097

EDUCATION ([view](#))

Graduate Scientific ([view](#))

Ph.D. Doctor of Philosophy, Medicinal Chemistry (February 1994).

Institution: Wayne State University, Department of Pharmaceutical Sciences.

Supervisor: Dr. Patrick M. Woster.

Dissertation: “Synthesis and Evaluation of Unnatural Polyamine Analogs as Inhibitors of Spermidine/Spermine-N¹-Acetyltransferase (SSAT)”. ([view](#))

Graduate Educational ([view](#))

School Administrator Certification (May 2019 to June 2020),

Concordia University, Ann Arbor, Michigan. ([view](#))

M.Ed. Master of Education with International Baccalaureate (IB) (May 2011). ([view](#))

Institution: Oakland University, Department of Professional Development and Education Outreach.

Supervisor: Prof. Dyanne Tracy.

Thesis: “Factors Affecting the Performance of the Bilingual Students: Analysis and Recommendation”. ([view](#))

M.A.T. Master of Art in Teaching (May 2006). ([view](#))

Institution: Wayne State University, Department of Education.

Supervisor: Dr. Maria Ferriera.

Thesis: “Chemistry Students’ Analysis of Science-Related Real-World Context: An Approach to Understanding Scientific Inquiry”. ([view](#)) ([view](#))

Undergraduate Educational ([view](#))

IB, DP. International Baccalaureate (IB) Teacher Award Diploma Programme (DP) (June 2010).

Institution: International Baccalaureate, Gardiff, United Kingdom. ([view](#))

Teaching Certificate. Professional Secondary Teaching Certificate (September 2005).

Institution: Wayne State University, Department of Education.

Endorsements: Chemistry (DC), Physics (DE), Arabic (FK). ([view](#))

A.P. Teaching Advanced Placement Secondary Courses.

Institution: Advanced Placement Summer Institute, Oakland University.

Endorsements: A.P. Physics (July 2006, [view](#)), A.P. Chemistry (July 2005, [view](#)).

STARTALK 2007. K-12 teachers of Arabic as a foreign language (August 2007).

Institution: Middlebury College, Vermont. ([view](#))

Educational Leadership. Theory and Practice (Summer 2008).

Institution: University of Michigan, Flint.

Endorsement: 16 credits accomplished. ([view](#))

Undergraduate Scientific ([view](#))

Bachelor of Science: Chemistry (May 1986).

Institution: Lebanese University, Faculty of Sciences, Beirut.

PATENT ([view](#))

Applicant: Nada Saab-Ismail

Date Issued: June 24, 2003

Institution: University of Alabama at Birmingham

U.S. Patent Application 09/864, 868

Title: "Polyamine Analogues Having Anti-proliferative Activity". ([view](#))

PROFESSIONAL EXPERIENCE ([view](#))

Faculty/ Teaching ([view](#), [view](#), [view](#))

Mentor/Teacher, AP, Chemistry, Chemistry (October 2017 - August 2022), Western International High School, Detroit Public Schools Community District, MI.

Software Development, Translator English-Arabic (December 2016- Present), Lakeside software, Ann Arbor, MI.

Bilingual Facilitator, (Jan. 2009 - October 2017), Wayne County Regional Educational Service Agency (Wayne RESA), MI. ([view](#))

Science Teacher/Expert, Physics (Nov. 2009 - Nov. 2016), Westwood Cyber High School, MI. ([view](#), [view](#))

Director / Curriculum Coordinator of Arabic/Science programs. (Aug. 2006 - July 28, 2008), Hamadeh Educational Services, MI. ([view](#))

Adjunct Faculty, General Chemistry II, CHE 152 and lab. (Jan. 2006 - July 2006), Oakland Community College, Orchard Ridge, MI. ([view](#), [view](#))

Science Teacher, Middle and High School (Dec. 2003 - Aug. 2006) Detroit Public Schools (Science, Chemistry, Physics), MI. ([view](#)) ([view](#))

Adjunct Faculty, Inorganic Chemistry 141, Organic Chemistry 241 and 242, Introductory Chemistry 091 (Sept. 2001 - Dec. 2003), Henry Ford Community College, MI. ([view](#))

Adjunct Faculty, Biochemistry 471, Organic Laboratory 227 (2002), University of Michigan in Dearborn, MI. ([view](#), [view](#))

Graduate/Postdoctoral Research ([view](#))

Consultant (June 1999 to present) Elgavish Paramagnetics Inc. Birmingham, Alabama.

Guest Researcher (Dec. 2000 - March 2002), Wayne State University, Chemistry Department, MI.

Postdoctoral Research Associate (Oct. 1995 - June 2001). ([view](#), [view](#))

Institution: University of Alabama at Birmingham, School of Medicine.
Department of Biochemistry, AL.

Supervisor: Prof. Gabriel A. Elgavish.

Project: Contrast agents and shift reagents to enhance contrast in NMR imaging and spectroscopy.

Postdoctoral Research Associate (May, 1994 - Oct. 1995). ([view](#))

Institution: University of Tennessee, Department of Pharmaceutical Sciences, Memphis, TN.

Supervisor: Prof. Duane D. Miller.

Project: Molecular probe for aldose reductase inhibitor site toward the treatment of diabetic complications.

Graduate Research/ Teaching Assistant (April 1990 - May 1994) ([view](#))

Institution: Wayne State University, Department of Pharmaceutical Sciences.

Supervisor: Dr. Patrick M. Woster.

Project: Synthesis and Evaluation of Unnatural Polyamine Analogs as Inhibitors of Spermidine/Spermine-N¹-Acetyltransferase (SSAT).

Instructor of Chemistry, Physics and Mathematics (Aug. 1986 - May 1988)

Bint-Jbail Public Official Secondary School, Lebanon.

CONSULTANT

Research/Drug Design Consultant (June 1999 - present)

Elgavish Paramagnetics Inc. Birmingham, Alabama.

GRANT

Individual National Research Service Award PHS 416-1 awarded **June, 1998**. National Institute of Health.

Title of the Proposal:“Synthesis of Cardiac Specific MRI Contrast Agent”.

Principal Investigator: Nada H. Saab, Ph.D.

Funding Period: June 16, 1998 to June 15, 2001

Total Direct Costs: \$ 117,852.0

PUBLICATION RECORDS ([view](#))

Books (on-line):

Physics by Saab: ([view](#))

A physics curriculum for high school and college students. It includes 60 lessons, tables of content and concept maps.

12 Journal Articles: ([view](#)) ([view, pdf](#))

Nada Saab-Ismail: Letters to The Language Educator. **The Language Educator**, volume 2, Issue 4, page 6, August (2007). ([view](#))

Pal Suranyi, Pal Kiss, Brigitta C. Brott, Tamas Simor Ada Elgavish, Balazs Ruzsicz, **Nada H. Saab-Ismail**, and Gabriel A. Elgavish: Percent Infarct Mapping: An R1-Map-Based CE-MRI Method for Determining Myocardial Viability Distribution. **Magnetic Resonance in Medicine**, 56:535-545 (2006). ([view](#))

Balazs Ruzsicz, Pal Suranyi, Pal Kiss, Brigitta C. Brott, Ada Elgavish, **Nada H. Saab-Ismail**, Tamas Simor, Gabriel Elgavish: Gd(ABE-DTTA): a Novel Contrast Agent, at the MRI-Effective Dose Shows Absence of Deleterious Physiological Effects in Dogs. **Pharmacology**, 77:188-194 (2006). ([view](#))

P. Kiss, MD, P. Suranyi, MD, T. Simor, MD, PHD, **N.H. Saab-Ismail**, PhD, A. Elgavish, PhD, L. Hejjel, MD, and G.A. Elgavish, PhD: In Vivo R1-Enhancement Mapping of Canine Myocardium using CeMRI with Gd(ABE-DTTA) in an Acute Ischemia-Reperfusion Model. **J. of Magnetic Resonance**, 24:571-579 (2006). ([view](#))

Gaszner, B., Simor, T., **Saab, N.H.**, Elgavish, R. and Elgavish, G.A.: Characterization of Ca²⁺ Adducts Formed with Shift-reagent Tm(DOTP). Submitted to **Inorg. Chem.** ([view](#))

Saab, N.H., Simor, T., Gaszner, B., Szollosy M. and Elgavish, G.A.: Synthesis and in vivo Evaluation of a New Contrast Agents for Cardiac MRI. **J. Med. Chem.**, 42 (No 15), 2852-2861 (1999). ([view](#))

Saab, N.H., Rodriguez, L., Donkor, I.O., Kador, P.F. and Miller, D.D.: Phenylsulfonyl-nitromethanes as Potent Irreversible Inhibitors of Aldose Reductase. **Eur. J. Med. Chem.**, 34, 745-751 (1999). ([view](#))

Simor, T., Gaszner, B., **Saab, N.**, Oshinski, J., Waldrop, S., Pettigrew, R., Horvath, I., Hild, G. and Elgavish, G.: Gd(ABE-DTTA)-Enhanced High Resolution Cardiac MRI for the Diagnosis of Acute Myocardial Ischemia. In **XIII world Congress of Cardiology**, Rio de Janeiro, Brazil 26-30 April **1998**, Monduzzi Editor, S.P.A.-Bologna (Italy), pp. 865-869. ([view](#))

Wu, R.H., **Saab, N.H.**, Huang, H., Wiest, L., Pegg, A.E., Casero, Jr., R.A. and Woster, P.M.: Synthesis and Evaluation of Polyamine Phosphinates and Phosphonamidates as Transition State Analogue Inhibitors of Spermidine/Spermine-N¹-Acetyltransferase. **Bioorg. Med. Chem.**, 4 (No 6), 825-836 (**1996**). ([view](#))

Casero, R.A., Mank, A.R., **Saab, N.H.**, Wu, R. and Woster, P.M.: Growth and Biochemical Effects of Unsymmetrically Substituted Polyamine Analogues in Treated Human Lung Tumor Cells. **Cancer Chemother. Pharmacol.**, 36 (1), 69-74 (**1995**). ([view](#))

Vage, C., **Saab, N.H.**, Woster, P.M. and Svensson, C.K.: Dapsone-Induced Hematologic Toxicity: Comparison of the Methemoglobin-Forming Ability of Hydroxylamine Metabolites of Dapsone in Rat and Human Blood. **Toxic. and Appl. Pharm.** 129, 309-316 (**1994**). ([view](#))

Saab, N.H., West, E.E., Bieszk, N.C., Preuss, C.V., Mank, A.R., Casero, R.A. and Woster, P.M.: Synthesis and Evaluation of Unsymmetrically Substituted Polyamine Analogues as Inhibitors of Spermidine/Spermine-N¹-Acetyltransferase as Potential Antitumor Agents. **J. Med. Chem.** 36, 2998-3004 (**1993**). ([view](#))

15 Abstracts:

Nada Saab: To the Rescue of our K-12 Schools, please. ACS 2023 Central Regional Meeting in Dearborn, MI, June 18, 2023. ([view](#))

Simor, T. Hild, G. **Saab, N.**, Doyle, M., Van der Geest, R.J., Pohost, G.M., and Elgavish, G.A.: Simultaneous Detection of Myocardial Perfusion and Function by Contrast Agent Enhanced Perfusion MRI. ISMRM (International Society for Magnetic Resonance in Medicine), Annual Meeting, Philadelphia, Pennsylvania, May 24, 1999.

Tamas Simor, Gabor Hild, **Nada Saab**, Mark Doyle, Gerald M. Pohost, and Gabriel A. Elgavish: Gd(ABE-DTTA)-Enhanced Dual Phase, Multi-Slice, Perfusion MRI for the Simultaneous Detection of Myocardial Perfusion and Function. Supplement to Circulation. Journal of the American Heart Association. Vol 98, No. 17, I-1 to I-1016,

October 27, 1998. (Abstract #2704, pp I-514). 71st Scientific Sessions, Dallas, Texas, November 8-11, 1998.

Simor, T., Gaszner, B., **Saab, N.H.**, Horvath, I.G., Hild, G., Oshinski, J.M., Waldrop, S.M., Pettigrew, R.I, and Elgavish, G.A.: Gd(AEB-DTTA)-Enhanced High Resolution Cardiac MRI for the Diagnosis of Acute Myocardial Ischemia. XIII World Congress of Cardiology, Rio de Janeiro, Brazil, April 27-30, 1998.

Saab, N.H., Donkor, I.O., Rodriguez, L., Kador, P.F. and Miller, D.D.: Multisubstrate and Buckminsterfullerene Analogues Toward the Inhibition of Aldose Reductase. Presented at the 51th Southeast-47th Southwest American Chemical Society Regional Meeting, November 29-31, 1995, Memphis, TN.

Saab, N.H., Rodriguez, L., Donkor, I.O., Kador, P.F. and Miller, D.D.: N-4 Substituted Phenylsulfonyl-nitromethanes as Potent Inhibitors of Aldose Reductase. (Abstract #MEDI 71). Presented at the 210th American Chemical Society National Meeting, August 20-24, 1995, Chicago, IL.

Wu, R.H., **Saab, N.H.** and Woster, P.M.: Synthesis and Evaluation of Phosphate-Based Transition State Analogue Inhibitors of Spermidine/Spermine-N¹- Acetyltransferase (SSAT). Presented at the 14th Midwest Enzyme Chemistry Conference, October 14, 1995, Chicago, IL.

Wu, R.H., **Saab, N.H.**, Huang, H., Wiest, L., Pegg, A.E., Casero, Jr.' R.A. and Woster, P.M.: Synthesis of Polyamine Phosphinates and Phosphonamidates as Transition State Analogue Inhibitors of Spermidine/Spermine-N¹- Acetyltransferase. Presented at the 1995 Gordon Conference on Polyamines, June 11-16, 1995, Meriden, NH.

Casero, R.A., Mank, A.R., **Saab, N.H.** and Woster, P.M.: Biochemical Effects of Asymmetrically Substituted Polyamine Analogues in Human Lung Tumor Cells. Presented at the American Association of Cancer Research National Meeting, April 10-15, 1995, San Diego, CA. (*Proc. Amer. Assoc. Cancer Res.* **1994**, *35*, 402)

Saab, N.H. and Woster, P.M.: Synthesis of a Phosphonamidate Transition State Analogue Inhibitor for Spermidine/Spermine N¹-Acetyltransferase (SSAT). Presented at the 206th National Meeting of the American Chemical Society, March 13-18, 1994, San Diego, CA.

Casero, R.A., Mank, A.R., **Saab, N.H.** and Woster, P.M.: Biochemical Effects of Asymmetrically Substituted Polyamine Analogues in Human Lung Tumor Cells. Presented at the National Meeting of the American Association of Cancer Research, September, 1993

Casero, R.A., Mank, A.R., **Saab, N.H.** and Woster, P.M.: Differential Induction of Spermidine/ Spermine N¹-Acetyltransferase (SSAT) and Growth Effects of Unsymmetrically Substituted Polyamine Analogues in Treated Human Lung Tumor Cells. Presented at the 3rd. Annual Wayne State University Conference on Cancer Research, July 18-23, 1993, San Diego, CA.

Saab, N.H. and Woster, P.M.: Synthesis and Evaluation of 1-(N-Ethylamino)-11-(N-propargylamino)-4,8-diazaundecane, A Potent Inhibitor of Mammalian Spermidine/Spermine-N¹-Acetyltransferase (SSAT). Presented at the 205th National Meeting of the American Chemical Society, March 28 - April 2, 1993, Denver, CO.

Saab, N.H., Bieszk, N.C., West, E.E., Casero, R.A. and Woster, P.M.: Polyamine Fumaramate Esters as Inhibitors of Spermidine/Spermine N¹-Acetyltransferase (SSAT). Presented at the 11th Annual Midwest Enzyme Chemistry Conference, October 12, 1991, Chicago, IL.

Saab, N.H., Bieszk, N.C., West, E.E., Casero, R.A. and Woster, P.M.: Polyamine Fumaramate Esters as Inhibitors of Spermidine/Spermine N¹-Acetyltransferase (SSAT) (Abstract #MEDI 21). Presented at the 202nd American Chemical Society National Meeting, August 25-30, 1991, New York, NY.

Invited Presentations

University of Toledo, Department of Pharmaceutical Sciences, January 12, 1995
Title: "Enzyme Inhibitors in Anti-tumor and Diabetic Therapy".

Oakland University, Department of Chemistry, October 10, 1998.
Title: "Synthesis and *in vivo* Evaluation of New Contrast Agents for Cardiac MR Imaging".

Others [\(view\)](#)

Study of Principalship by **Nada Saab**. Summer 2008. [\(view\)](#)

International Baccalaureate Programmes - A Brief Overview by **Nada Saab**, 2008. [\(view\)](#)

A Look at the top 46 pharmaceutical that change our world and have a major impact on health and society, 11th and 12th grade students. **Nada Saab**, 2009. [\(view\)](#)

PANELS, AWARDS, PROFESSIONAL SOCIETIES ([view](#))

Review Panels ([view](#))

Reviewer: Michigan Interim Assessment- Science Content Advisory Committee Member (Physics, Chemistry and Earth Science) (2012- present).

Member, Organization Planning Committee , Wayne Regional Educational Service Agency (2010-2011).

Member, Strategic Planning for Arabic and Science Departments, Hamadeh Educational Services (2006-2008).

Member, Content Advisory Committee , Michigan Test for Teacher Certification- Bilingual Education (MTTC) Item Review Conference , Michigan Department of Education and the Evaluation Systems group of Pearson (2008).

Member, Statewide Task Force on establishing Arabic language standards for educator certification committee (2006), Michigan Department of Education and the State Board of Education.

Member of a Michigan Department of Education High School Science Content Expectations Review Group for Chemistry (2006).

Awards and Honors ([view](#))

Second Career Chemistry Teacher Scholarship (2009-2010)
Hach Scientific Foundation, American Chemical Society

Permanent Resident Status as Outstanding Researcher (May 17, 1996),
U.S. Department of Justice, Immigration and Naturalization Service
Sponsor: University of Alabama at Birmingham

Fellow: Thomas C. Rumble Graduate (August, 1993 to June, 1994)
Wayne State University

Fellow: Elsa U. Pardee Foundation(August, 1991 to May, 1993)

Member, Rho Chi Pharmaceutical Honor Society (1990)

Professional Societies

Member, American Association for the Advancement of Science (AAAS), 2018.

Member, American Chemical Society (ACS, 1990 to present)

Metropolitan Detroit Science Teachers Association (2007, 2017, 2018)

American Association of Teachers of Arabic (2006)

Michigan world Language Association, American Council of Teachers of Foreign Languages, ACTFL (2006).

PROFESSIONAL REFERENCES

A) K-20 Teaching

Mr. Angel Garcia, Principal, Western International High School, DPSCD, 1500 Scotten Street, Detroit. Phone: (313) 849-4758. angel.garcia@detroitk12.org

Mr. Robert Santavicca, Assistant principal, Western International High School, DPSCD. 1500 Scotten Street, Detroit. Phone: (313) 849-4758. robert.santavicca@detroitk12.org

Mr. Chris Wigent, Executive Director of the Michigan Association of School Administrators, 001 Centennial Way, Suite 300, Lansing, MI, 48917, Phone: (517) 327-5910
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Deborah Szeman, ESL Consultant, Wayne RESA, 33500 Van Born Road, P.O. Box 807 Wayne, MI, 48184, Phone: (734) 334- 1544, Fax: (734) 334 –1494,
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Dave E. Stoddard, Professor of Physics and Astronomy, Oakland Community College 27055 Orchard Lake Road, Farmington Hills, MI, 48334, Phone: (248) 522-3400
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Ms. Suzan Mitchell, Director of Special Education, Dearborn Heights District # 7. 20629 Annapolis St, Dearborn Heights, MI, 48125. Phone: (313) 278-1900.
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Prof. Paul W. Zitzewitz, Department of Natural Sciences, The University of Michigan 4901 Evergreen Road, Dearborn, MI, 48128. Phone: (313) 593-5277
pwz@umd.umich.edu

Willie L. Nicholson, 17327 Coral Gables, Lathrup Village, MI 48076
Phone: (248) 552-0612, (313) 577-4035

Dr. Warren Yeakel, Henry Ford Community College, Science Department, 5101 Evergreen Rd. Dearborn, MI. 48128. Phone: (313) 845-6310
wyeakel@hfcc.edu

Kristen Kajoian, Principal,, Tomlison Middle School, 25912 Annapolis Street, Inkster, MI, 48141. Phone: (313) 565-3393
Kajoiank@wwschools.net

Hilliard Hampton, Former Managing Director, Westwood Cyber High school. Phone : 313-565-3599

hilliardhampton@wchs.wwschools.net

Mrs. Nawal Hamadeh, Superintendent and CEO, Hamadeh Educational Services, 23825 Waverly Road, Dearborn Heights, MI, 48127, Phone: (313) 565-0507 nhamadeh@hes.org

B) Graduate Education and Appointment

Gabriel A. Elgavish, Ph.D., Professor of Medicine, Department of Biochemistry and Molecular Genetics , University of Alabama at Birmingham, McLM 556, 1530 3RD Ave S. Birmingham, AL, 35294-0005. Phone: (205) 934-0294.

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Professor Patrick M. Woster, Director of MUSC Drug Design and Synthesis Core
Medical University of South Carolina, 169 Ashley Avenue, Charleston, SC, 29425
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Woster@musc.edu

Duane D. Miller, Ph.D., Chair and Associate Dean, University of Tennessee Health Science Center , 847 Monroe Avenue, room 327. University of Tennessee, Memphis, TN, 38163.
Phone: (901) 448-6020.

dmiller@uthsc.edu

Wafa N. Hassan, Ed.D. Outreach Academic Specialist, Michigan State University
Department of Linguistics and Languages, A644 Wells Hall, East Lansing, MI,
48824-1027. Phone: (517) 353-7870

hassanw@msu.edu

Prof. Jazelin Ebenezer, 299 College of Education, Wayne State University, Detroit, MI 48202
Phone: (313) 577-0918.

aj6366@wayne.edu

Mahdi Alish, Professor of Arabic Language, United States Military Academy
West Point, NY 10996. Phone (845) 938-0041/8307

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