Department of Pharmacology & Toxicology
Annual Report
2016
Jeffrey Travers, MD, PhD
Professor and Chair

For the period including
January 1, 2016 — December 31, 2016
Statement from the Chair/Associate Dean

[Highlights of the year limited to 500 words]

2016 was a year of growth for the Department of Pharmacology & Toxicology. Many accomplishments of the faculty, staff and students of the Department took place, some of which are detailed below.

Faculty. No new faculty were hired in 2016 though we have begun the process of hiring an additional Assistant Professor to begin in 2017. Dr. Ji Bihl received the Scientist Development award from the American Heart Association. Dr. Terry Oroszi was promoted to Assistant Professor. Dr. Richard Simman was promoted to Professor. Dr. Courtney Sulentic received the Ohio Valley Society of Toxicology Distinguished Service Award.

The Faculty participated in our second annual retreat this past fall which was centered around the master’s program. The faculty worked toward our goal of increasing the size of the master’s program by 50% in the next five years. Growth will come from several areas. First, we plan to increase the numbers of thesis students to take advantage of the larger numbers of active research labs. Second, we plan to modify our non-thesis Leadership Administration track to create a clinically-oriented master’s degree, to leverage our Pharmacology Translational Unit (PTU). Finally, we will increase the size of the MD-MS program. A full year has passed since an incentive award policy was developed to compensate faculty who are high performers in the educational, service and mentoring missions of the Department.

Research. Drs. Ji Bihl and Mauricio Difulvio both were awarded American Diabetes Association research grants. Drs. DiFulvio and Khalid Elased both submitted NIH R21 grants focused on under-represented minorities. Dr. Difulvio’s grant received a good score and is possibly to be funded (will not be decided until winter). Drs. Sulentic and Travers received a new R21 grant. The PTU obtained three new studies: 1) the CORRONA Psoriasis Registry Study; 2) the CLARITY Trial, Novartis, with the goal of this multicenter double-blinded study to test Cosentyx vs Stelara for moderate-to-severe psoriasis subjects; and 3) Innovaderm study testing an infusion agent for adult atopic dermatitis. These studies were added to the current MAVIS trial testing a melanoma vaccine. Two further pediatric psoriasis studies are in the process of being finalized. Given the added pharma and research translational studies, the PTU has hired Elizabeth Cates, LPN (full-time coordinator), and Scott Newman, NP-C (part-time provider).

Education. The master’s program continued to recruit and train high numbers of students. In 2016, we saw a slight decrease in the historic enrollment of master’s students seen in 2015. See more details above regarding Fall faculty retreat.

Service/Other. The Departmental newsletter continued to keep our faculty, students, alumni and others aware of the changes in the Department. Dr. Oroszi initiated a “Dayton Think Tank” focused on terrorism which included many members of the Dayton community including the Dayton mayor.

Summary. The Department has emerged from 2016 poised to take advantage of the strong educational enterprise and is developing a strong research portfolio, to include translational
human studies. Our plan for 2017 is to continue to strengthen the missions of Education, Research & Service.

2

Programs/Divisions

<table>
<thead>
<tr>
<th>Name of Division or Program</th>
<th>Director</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell Biophysics</td>
<td>Norma Adragna, Ph.D.</td>
<td>2003-present</td>
</tr>
<tr>
<td>Proteome Analysis Laboratory</td>
<td>David Cool, Ph.D.</td>
<td>2004-present</td>
</tr>
<tr>
<td>Master’s Program</td>
<td>Terry Oroszi, Ed.D.</td>
<td>2008-present</td>
</tr>
<tr>
<td>Nanotoxicology Research</td>
<td>Saber Hussain, Ph.D.</td>
<td>2010-present</td>
</tr>
<tr>
<td>Training Program (BIOST)</td>
<td>Khalid Elased, PharmD., Ph.D.</td>
<td>2013-2016</td>
</tr>
<tr>
<td>Therapeutics Curriculum</td>
<td>Mary Jo Trout, Pharm.D.</td>
<td>2013-present</td>
</tr>
<tr>
<td>Training Program (BioSTAR, GradPrep)</td>
<td>Courtney Sulentic, Ph.D.</td>
<td>2015-present</td>
</tr>
<tr>
<td>Preclinical Pharmacology Core</td>
<td>Yanfang Chen, M.D., Ph.D.</td>
<td>2015-present</td>
</tr>
<tr>
<td>Pharmacology Translation Unit (PTU)</td>
<td>Jeffrey Travers, M.D., Ph.D.</td>
<td>2015-present</td>
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</tbody>
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3

Fully Affiliated Faculty (may be the same as #2 above for some depts)

<table>
<thead>
<tr>
<th>Name and Academic Position</th>
<th>Clinical Interests</th>
<th>Research Interests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norma Adragna, Ph.D., Professor</td>
<td></td>
<td>Cardiovascular, ion transport, cell signaling, cellular physiology, membrane transport, cancer biology</td>
</tr>
<tr>
<td>Francisco Javier-Alvarez-Leefmans, M.D., Ph.D., Professor</td>
<td></td>
<td>Neuroscience, molecular physiology &amp; pharmacology, clinical neurology</td>
</tr>
<tr>
<td>Name and Academic Position</td>
<td>Clinical Interests</td>
<td>Research Interests</td>
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<tr>
<td>Ji Bihl, M.D., Ph.D., Research Assistant Professor</td>
<td>Cerebrovascular diseases and diabetes, specifically in developing novel predictive and therapeutic avenues for hemorrhagic stroke and vascular complications of diabetes</td>
<td></td>
</tr>
<tr>
<td>Yanfang Chen, M.D., Ph.D., Professor</td>
<td></td>
<td>Cardiovascular disease, cerebrovascular complications</td>
</tr>
<tr>
<td>Mauricio Di Fulvio, Ph.D., Assistant Professor</td>
<td>Diabetes</td>
<td></td>
</tr>
<tr>
<td>Khalid Elased, PharmD., Ph.D., Professor</td>
<td>Diabetes, cardiovascular</td>
<td></td>
</tr>
<tr>
<td>Saber Hussain, Ph.D., Professor</td>
<td></td>
<td>Nanoparticles</td>
</tr>
<tr>
<td>Terry Oroszi, Ed.D., Assistant Professor, Graduate Program Director, CBRN Defense Program Director, Co-chair EMDP Advisory Board</td>
<td>Group decision making and meeting behaviors</td>
<td></td>
</tr>
<tr>
<td>Ravi Sahu, Ph.D., Assistant Professor</td>
<td>Cancer pharmacology</td>
<td></td>
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<tr>
<td>Richard Simman, M.D., Professor</td>
<td>Wound care, plastic surgery</td>
<td>Wound care treatment</td>
</tr>
<tr>
<td>Courtney Sulentic, Ph.D., Associate Professor</td>
<td></td>
<td>Immunology</td>
</tr>
<tr>
<td>Mary Jo Trout, PharmD., Assistant Professor</td>
<td>Medical training, therapeutics curriculum</td>
<td></td>
</tr>
<tr>
<td>Jeffrey Travers, M.D., Ph.D. Professor and Chair</td>
<td>Translational medicine</td>
<td>Skin inflammation/cancer, Lipid pharmacology</td>
</tr>
<tr>
<td>Yong-jie Xu, Ph.D.,</td>
<td></td>
<td>Genome integrity, signaling mechanism of replicator checkpoint</td>
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### Teaching

**Baccalaureate** [any course for a bachelor’s degree]

**Dr. Courtney Sulentic**
M&I 4260 Microbiology and Immunology, Lecturer (9.5 hrs)

Students:
Gabriel Crabb, WSU, BioSTAR Trainee

**Dr. Yongjie Xu**
Raisa Siddique, WSU biology major, Cap stone lab research

**Graduate students, including thesis supervision** [master’s, doctor’s post-doctoral]

**Dr. Norma Adragna**

Courses
PTX 9120 Effective Scientific Writing: Part 1, Co-Director
PTX 9220 Effective Scientific Writing: Part 2, Director
Thesis Director
Praveen Alla, MS, 2014-graduated, Fall 2016
Vamsi Chandu, MS, 2015-2016
Nedu Izhezurike, MS, 2015-present

Thesis Co-Director
Chandra Maharjan, MS, 2014-2016, graduated 2016
Joshua Stricker, MS 2016-present
Lamai Alsulaiman, MS, 2015-2016
Gousia Begum, MS, 2016-present

Thesis Advisory Committees
Shesha Paluri, BMS, 2011, 2013-present
Terry Oroszi, EdD, 2016

Dr. F. Javier Alvarez-Leefmans
Courses
PTX 9120 Effective Scientific Writing: Part 1, Director
PTX 9220 Effective Scientific Writing: Part 2, Co-Director
BMS 8750/P&N 7750 Neuroscience & Physiology, Lecturer, 2 lectures
BMS 9940 Introduction to Research, Lecturer, 2 hr lecture

Thesis Advisory Committees
Jacob Vincent, 5th yr MD/PhD student
Pavani Beesetty, BMS PhD program
Vishal Faldu, MS Electrical Engineering, trained on quantitative analysis of digital imaging
Jeannine Crum, PhD, 9th year, BMS
Aaron Madaris, MS Biomedical Engineering.

Dr. Ji Bihl
Courses
PTX 8000 Cell Culture, summer
PTX 8000 Cell Culture, fall
PTX 7002 Journal Club, fall

Thesis advising
Katherine Fahy, MS, 2015-2017 (Mentor: Jeffrey Travers)
Sayali Dharmadhikari, MS Student, 2014-2016 (Mentor: Adrian M. Corbett)

Dr. Yanfang Chen
Thesis Director
Qinmao Ye, MS 2016-present

Students
Jinju Wang, PhD
Xiang Xiao, PhD
Yue Wang, visiting scholar
Qian Cheng, visiting scholar

Thesis Committee
April Arnold Daubenspeck, PhD
Abdelfatah Abou Issa, MS, graduated 2016

Dr. David Cool
Courses
PTX 7400 Laboratory Management, Director, 60 hours
PTX 7500 Research Techniques, Director, 90 hours
PTX 7021 Effective Science Writing I, 30 hours
PTX 8000 Laboratory Management, 30 hours
BMS 805 Intercellular communication, 4 hours
Thesis Director
Ravina Ashtapure, MS, Graduated 2016
Fatem Bin Dayel, MS, Advisor-leadership
Anas Sergiwa, MS, Advisor-leadership
Bishal Marasini, MS, Advisor-leadership

Thesis Advisory Committees
Walid Mari, MS, projected graduation 2016
Abdelfateh Abou Issa, MS, graduated 2016
Siham Abdul, MS, projected graduation 2016
Katy Fahey, MS, projected graduation 2017
Brian Stogsdill, PhD, projected graduation 2017
Mahmoud Alghamri, PhD, graduated 2016
Yirong Zhou, PhD, projected graduation 2018
Jenny Jurcsisin, PhD, projected graduation 2019

Dr. Mauricio Di Fulvio
Courses
PTX 7001 Cellular Pharmacology & Toxicology, Co-Director
PTX 7300 Cellular Pharmacology & Toxicology, Co-Director
PTX 7110 Journal Club, Director

Dr. Khalid Elased
Courses
PTX 7001 Cellular Pharmacology & Toxicology, lectures on cardiovascular/Obesity/Diabetes
PTX 9120 Effective Scientific Writing: Part 1, Co-Director
PTX 9220 Effective Scientific Writing: Part 2, Co-Director

Thesis Director
Rucha Fadnavis, MS, projected graduation 2017

Thesis Advisory Committees
Ravina Milind Ashtaputre, MS, graduated 2016
Xiang Xiao, PHD, projected graduation 2017

Dr. Saber Hussain
Courses
PTX 8130 Nano Medicine

Thesis Co-Director
Shahryar Qureshi, MS, projected graduation 2018

Dr. Terry Oroszi
Courses
PTX 7022 Effective Scientific Writing: Part 1, summer, fall
PTX 9220 Effective Scientific Writing: Part 2, spring, summer, fall
PTX 8000-05 Leadership, Theory & Application, spring
PTX 8000-09 Advanced Science Writing, spring
PTX 8140 Human Studies Research, spring, summer, fall
PTX 8120 Case Studies for CBRN Defense, spring, summer
PTX 8210 Applications to Medical Bio Defense, spring, fall
PTX 8000-01 MD/MS Capstone Journal Club, summer
PTX 8120 Intro to PTX Graduate Research, fall

Advisor Leadership
Eman Alabdrabalnabi, graduated
Yusra Andijani, graduated

Dr. Ravi Sahu
Courses
PTX 7021 Effective Scientific Writing: Part 1, alternate faculty
PTX 9220 Effective Scientific Writing: Part 2, alternate faculty
Leadership advisory/lab work
Jeremiah Saylee, MS, projected graduation 2017
Bishal Maracini, MS, projected graduation 2017

Dr. Richard Simman
Courses
PTX 8080 Wound Healing

Thesis Director
Sami Gamaleddin, 2015-present
Sani Sabri, 2016-present
Walid Mari, projected graduation 2017

Dr. Courtney Sulentic
Courses
PTX 7300 Cellular Pharmacology & Toxicology, lecturer 18 hours, Faculty Facilitator, 30 hours
M&I 7260 Microbiology and Immunology, lecturer, 17 hours
M&I 7260 Microbiology and Immunology Seminar Course, co-director, 28 hours
BMS 8050 Intercellular Communication, lecturer 4.5 hours, Faculty Facilitator 1.5 hours

Thesis Director
Andrew Snyder, BMS, PhD, defended spring 2016
Rebecca Law, MS, non-thesis research project, graduated 2016
Zahra Jassim Alfafeeda, Microbiology/Immunology M.S., defended spring 2016
Nicole Panstingel, Pharm/Tox M.S.
Siham Abdulla, Pharm/Tox M.S.
Nasser Alhamdan, Microbiology/Immunology M.S.
Clayton Buckner, Microbiology/Immunology M.S.
Jennifer Rubio, visiting intern from Cal Polytech, summer 2016

Thesis Advisory Committees
Amanda Hanes (BMS representative), BMS, Ph.D.
Sumeet Poudel, BMS, Ph.D.
Kevin Novak, (BMS representative), BMS Ph.D.
Tu Thien Danh, BMS Ph.D.
Sumeet Poudel, BMS Ph.D.
Todd Lewis, BMS Ph.D. (BMS representative)
Denise Kramer, BMS Ph.D.
Caitlin Persin, Microbiology/Immunology M.S., defended summer 2016
Mary Thompson, Microbiology/Immunology M.S., defended summer 2016

Dr. Jeffrey Travers
Courses
PTX 7021 Effective Scientific Writing, faculty, fall
PTX 8000 Independent Study Journal Club, Director, summer

Thesis Director
Katherine Fahy, MS, projected graduation 2018
Langni Liu, PhD, 2016-present

Thesis Advisory Committees
Walid Mari, MS, projected graduation 2017
Nicole Panstingel, projected graduation 2017
Chien Poon, projected graduation 2017
Xiao Zhang, PhD, 2015-present
James Readler, PhD, 2015-present
Prakash Arumugan, MD/PhD, 2015-2016, graduated
Ann Collier, PhD at Indiana University, 2013-present
Dr. Yongjie Xu
Postdoctoral fellows
Hongbin Dong, PhD., 2015-2016
Michal Wozniak, PhD., 2016-present

Undergraduate medical education [medical school]

Dr. F. Javier Alvarez-Leefmans
Judge, Poster competition, 8th Annual Medical Student Research Symposium, BSOM
Madelyn G. Jones, Voluntary student from biology pursuing graduate education
Lecture on Back Pain with Dr. Rich, one session, 2nd year medical students

Dr. David Cool
SMD 521 CATOs (MCTB) Hormone Synthesis 1st year BSOM, 2 hours

Dr. Khalid Elased
SMD 580 Staying Alive Course, WrightQ sessions, 2nd year medical students
SMD 553 Digestive course, 2nd year medical students

Dr. Richard Simman
Sneha, medical student 2016

Dr. Courtney Sulentic
Principles of Disease, Engaged Learning Modules, faculty facilitator, 6 hours
Pathobiology and Therapeutics, Engaged Learning Modules, faculty facilitator, 5 hours
Wright Q facilitator, 32 hours

Dr. Jeffrey Travers
Pathobiology and Therapeutics Module 2nd year medical students
Problem-Based Learning Modules for “Immunologic Disorders and Immunopharmacology, Co-led, 4 hours
Problem-Based Learning Modules for “Environmental Pathology and Toxicology, Co-led, 4 hours

Graduate medical education [residents, fellows]

Dr. Richard Simman
Jessica, resident, 2016

Dr. Jeffrey Travers
Supervises dermatology residents and medical students in dermatology clinics, 8 hours/week

Continuing medical education [grand rounds, seminars]

Dr. Jeffrey Travers
“Cytokines” Midwest Dermatology Residencies Cutaneous Biology Course, Indianapolis, Indiana, Nov 2016

Other

Dr. David Cool
Proteomic Workshop, 4-5 day for students, staff and faculty

Dr. Mauricio Di Fulvio
Review Editor, Frontiers in Endocrinology

Dr. Terry Oroszi
Analyst Boot Camp- Terrorism and Leadership, students at WSRI ATIC, 2 days/semester

Dr. Ravi Sahu
Oral pres. 6th Global Summit on Toxicology & Applied Pharmacology, October 17-19, 2016, Houston TX

Dr. Courtney Sulentic
Mentor Match Program Mentor, SOT, Alicia Taylor, PhD, Post-doc, University of California, Berkeley
Mentor, Speed Mentoring Brunch & Mentoring Program, Women in STEMM Leadership Instituted and
Women in Science Giving Circle, Melinda Meiring, undergrad, WSU

Scholarly Activity

Funded grants [List PI(s), grant title, funding source, amount of award, and dates of award. Please list each grant only once. Identify student & resident authors, i.e., *=student author **=resident/fellow]

Dr. Norma Adragna

Dr. F. Javier Alvarez-Leefmans
Grant from the Dayton Children’s Hospital Foundation (PI). Fund 670180 "Pharmacological Control of Cerebrospinal Fluid Secretion with Bumetanide Targeting the Choroid Plexus Na+-K+-2Cl- cotransporter NKCC1: a rational medical treatment of idiopathic intracranial hypertension". Submitted on 02/22/15. The basic science portion of this application was funded. Total awarded funds: $ 20,000/year for two years. Official confirmation letter received on 02/08/16. Estimated Ending date 02/08/2018.

Dr. Ji Bihl
AHA Scientist Development Grant (16SDG26420078), PI, 1/1/2016-12/31/2019, ROLE OF ACE2 OVER-EXPRESSING ENDOТЕHELIAL PROGENITOR CELLS IN CEREBRAL HEMORRHAGE. The major goal of this project is to determine the preventive and therapeutic role of ACE2 over-expressing endothelial progenitor cells (ACE2-EPCs) in hemorrhagic stroke animal model and determine the underlying mechanisms, Co-PI Yanfang Chen

Dr. Khalid Elased
BSOM Translational Grant, 2016-2018. Novel Approach to the Discovery of New Urinary Biomarkers for Early Detection of Chronic Kidney Disease Role: Co-Principal Investigator. Total amount of Fund $ 50,000.00

American Society of Nephrology, Carl W. Gottschalk Research Scholar Grant, 2015-2017, "Molecular Imaging of RAS for the Discovery of Novel Biomarkers in Chronic Kidney Disease", Role: Co-Investigator (Grobe, PI) Total amount of Fund, $ 200,000.00

Henry Jackson Foundation, 2016-2017, Molecular Imaging of RAS for the Discovery of Novel Biomarkers in Chronic Kidney Disease, Role: Principal Investigator (sub-contractor) (Grobe PI). Total amount of Fund $25,000.00

Dr. Ravi Sahu
NIH/NIEHS 7K22ES023850-02, (P.I. Sahu), $487,551, 07/2014-06/2017, 9 Calendar months effort (6 academic + 3 summer), Environmental Pro-oxidative Stressors and immunosuppression

Dr. Richard Simman
Simman R (March2016-present) Effect of Bilaminar Hyalomatrix on Wound Bed Preparation, MedLine $40,000 PI.
Simman R (Dec 2013-present) Effect of Oasis Collagen matrix on Stage III and IV Trunk Pressure Wounds Treated with Negative Pressure Wound Therapy (NPWT). Smith & Nephew, $66,000. PI
Dr. Courtney Sulentic
5R25GM090122 National Institute of general Medical Sciences (08/01/2011-06/30/2016, currently in a no-cost extension) Biomedical Scholars Program (BioSTAR), Initiative for Maximizing Student Development (IMSD), Program Director
R21AR070010 NIH, co-PI (07/01/2016-03/31/2018), "Photodynamic therapy-induced immune modulation: Mechanisms and influence on therapeutic efficacy", Women in Science Giving Circle Faculty Grant

Dr. Jeffrey Travers
Pharmaceutical-sponsored studies:
MAVIS Melanoma Vaccine in State IIb,IIc and III Melanoma Patients (Travers) 10/01/2015 to 9/30/19
Polynoma LLC

The goal of this multicenter double-blinded placebo-controlled Phase III study is to test a polyvalent melanoma vaccine in high-risk melanoma patients. Our Pharmacology Translational Unit at Wright State University is one of the sites.

CORRONA Psoriasis Registry Study 07/01/2016 to 06/30/2021
The goal of this registry study sponsored by the National Psoriasis Foundation is to define effectiveness of various treatments for psoriasis. Our Pharmacology Translational Unit at Wright State University is one of the sites.

CLARITY Trial 11/01/2016 to 06/30/2018
Novartis
The goal of this multicenter double-blinded study is to test Cosentyx vs Stelara for moderate-to-severe psoriasis subjects. Our Pharmacology Translational Unit at Wright State University is one of the sites.

Extramural support:
R01 HL062996 (Travers) 07/01/1999 to 9/30/2019 25% effort
NIH/NHLB $250,000 direct costs/year
Platelet-activating factor and Epidermal Cytotoxicity
The objectives of this study are to define the role of oxidized glycerophosphocholines in UVB-mediated early responses in human and murine skin, as well as to characterize novel oxidized lipids produced in response to UVB.

R01 ES020866 (Spandau/Travers-co-PI's) 09/01/2012 to 5/31/2017 15% effort
NIH/NIEHS $225,000 direct costs/year
Mechanisms of photocarcinogenesis in geriatric skin
The objectives of this project are to define the lasting effects of dermal rejuvenation by dermabrasion or fractionated laser resurfacing techniques to increase dermal IGF-1 levels and correct the abnormal acute UVB response in geriatric subjects. IGF-1R signaling pathways that result in keratinocyte senescence will be defined by creating skin equivalents with keratinocytes expressing dominant-negative and overexpressing P38 MAPK and p53 proteins. These skin equivalents will be tested in vitro and in vivo for UVB-mediated pro-carcinogenic responses. This grant will remain at Indiana University and I will subcontract to perform clinical studies.

R01 AG048946-01A1 (Travers/Spandau-co-Pls) 09/01/2014 to 04/30/2019 20% effort
Wounding Therapy and Photocarcinogenesis $205,000 direct costs/year

The objective of these studies is to test the ability of wounding therapies including fractionated laser resurfacing to inhibit abnormal dermal senescence in human geriatric subjects and includes a clinical study to define if laser resurfacing can protect against skin cancer in geriatric subjects at our VA dermatology clinic. This grant has been moved to Wright State University and a subcontract established for Dr. Spandau.

R21 AR070010-01A1 (Travers-Sulentic-co-Pls) 07/01/2016 – 03/31/2018 10% effort
Photodynamic Therapy-Induced Immune Modulation: Mechanisms and Influence on Therapeutic Efficacy $125-150,000 direct costs/year
The objective of this study is to test the immune effects of PDT in human subjects.

Basic Science VA Merit Award (Travers) 10/01/2010 to 03/31/2020, 20% VA effort
510BX000853 $146,000 direct costs/year
Oxidized lipids and UV immunosuppression
The objective of this study is to define photodynamic therapy-mediated systemic immunosuppression using
Mmurine and human model systems.

Clinical VA Merit Award (Travers)  7/01/2014 to 6/30/2019, 20% VA effort
1101CX000809  $150,000 direct costs/year

IGF-1 and the initiation of non-melanoma skin cancer
The objectives of this grant are to test the pro-carcinogenic effects of chronic UVB on localized areas of skin on young versus geriatric subjects, and test whether localized IGF-1 is protective. In addition, the ability of topical IGF-1 inhibitor to augment procarcinogenic effects of UVB on human skin xenografted onto immunodeficient mice will be defined.

Dr. Yongjie Xu
NIH RO1-GM110132 Grant “Signaling Mechanism of the DNA Replication Checkpoint”, 2/1/2015-1/30/2020
Total Cost for the current year: $259000 ($84000 pro-rated indirect cost; $175000 prorated indirect cost)
Total Cost for the entire grant period is $1295000

Publications

Papers in refereed journals

Dr. Ji Bihl


Dr. Yanfang Chen


Dr. David Cool
Dr. Mauricio Di Fulvio
Halm S, Bottomely M, Almutairi M, Di Fulvio M, and Halm D. Survival and growth of C57BL/6J mice lacking the BK channel, Kcnma1: lower adult body weight occurs together with higher body fat. Physiological Reports.


Dr. Khalid Elased

Dr. Saber Hussain

Coker Z, Estlack L, Hussain SM, Choi TY, Ibey BL. Investigation of superparamagnetic (Fe3O4) nanoparticle and magnetic field exposures on CHO-K1 cell line. SPIE BiOS. 2016; 97061Y-97061Y-10.


Dr. Ravi Sahu

Dr. Richard Simman
D Mrdjenovich, R Simman, C Fleck, T Luttrel. The American College of Clinical Wound Specialists (ACCWS) Rebuttal to the Recent NPUAP Pressure Ulcer Definition (August 2016) DOI: http://dx.doi.org/10.1016/j.jaccw.2016.08.002


Dr. Courtney Sulentic

**Dr. Jeffrey Travers**


**Dr. Yongjie Xu**

Xu YJ, Singh A, and Alter GM 2016 Hydroxyurea induces cytokinesis arrest in cells expressing a mutated sterol-14a-demethylase in the ergosterol biosynthesis pathway. Genetics 204:959-973


**Books, chapters, reviews**

**Dr. F. Javier Alvarez-Leefmans**


**Dr. David Cool**


**Dr. Terry Oroszi**

James, L. and Terry Oroszi, T. Recognizing a Developing Terrorist: Seeing the Signs in your Neighborhood, Workplace, or School, Praeger Publishing, Santa Barbar, CA, 2016

**Dr. Ravi Sahu**


**Dr. Jeffrey Travers**


**Dr. Yongjie Xu**


**Published abstracts**

**Dr. Norma Adragna**


Dr. F. Javier Alvarez-Leefmans

Dr. Ji Bihl

Dr. Yanfang Chen

Dr. David Cool


Dr. Khalid Elased
Ndja Grobe, Laale Alawi , Rucha Fadnavis, Elased KM. Role of AT1a receptor in 2K1C model of renovascular hypertension and its impact on Renal ACE2 and NEP Protein Expressions, Conference: ASN Kidney Week 2016 Annual Meeting. Location: Chicago IL ,November 15-20, 2016, Sponsor(s): American Society of Nephrology

Dr. Saber Hussain
Total of 8 abstracts

Dr. Terry Oroszi


**Dr. Ravi Sahu**
Raymond L. Konger, Jeffrey B. Travers, Ravi P. Sahu. PPARγ activation is necessary for normal contact hypersensitivity responses and may promote cutaneous anti-tumor immune response. Abstract presented in the Society of Investigative Dermatology meeting 2016. DOI: 10.1016/j.jid.2016.02.616.


In addition to these published abstracts, several other abstracts were presented in national and internal meetings.

**Dr. Richard Simman**
Abdelfatah Abou Issa MD, Richard Simman MD. Effect of Oasis Ultra Matrix on the Healing Rate of Stage IV Pressure Wounds. SAWC, Wound Healing Society, fall meeting. October 6-9, 2016, Las Vegas, NV.

Richard Simman, MD, Walid Omari, MD. Use of Esterified Hyaluronic Acid Wound Matrix in Wound Bed Preparation, a Case Series. SAWC, Wound Healing Society, fall meeting. October 6-9, 2016, Las Vegas, NV.

Walid Mari, MD, Richard Simman, MD. The Role of Extracellular Microvesicles in Wound Healing. SAWC, Wound Healing Society, fall meeting. October 6-9, 2016, Las Vegas, NV.


Abdelfatah Abou Issa MD, Richard Simman MD, Julie Galkison, MD (April 13-17, 2016) Coverage of Exposed Lower Extremity Bypass Vascular Graft with Bi-Laminar Dermal Regeneration Template and NPWT for Limb Salvage. SAWC, Wound Healing Society Meeting, Atlanta, GA

Abdelfatah Abou Issa MD, Richard Simman MD, FACS, FACCWS (April 13-17, 2016) Clinical Usage Outcome of Porcine Intestinal Sub-Mucosa, A Case Series. SAWC, Wound Healing Society Spring Meeting, Atlanta, GA.


**Dr. Courtney Sulentic**


Snyder, A., Panstingel, Abdullah, S., Sulentic, C. E. W.: Reducing the number of hs1.2 invariant sequence repeats in the 3' immunoglobulin heavy chain regulatory region alters Ig expression. Toxicological Sciences, the Toxicologist, 150:1938, 2016.

**Dr. Jeffrey Travers**


Dr. Yongjie Xu

Significant presentations

Dr. Norma Adragna


Alla, P.K., Peter K Lauf, Ioana Pavel, Arathi Paluri, Marjorie Markopoulos, Jerome Yaklic, and Norma C. Adragna. Internalized silver nanoparticles alter ion transport and hemoglobin spectrum in human red blood cells. Ohio Valley Society of Toxicology, Annual Meeting, Indianapolis, IN, October 28th, 2016.

Joshua L Stricker, Norma C Adragna, and Peter K Lauf. Immuno-cytochemical exploration of interaction between Na/K ATPase (NKA), Bcl-2 (BclXI) and other proteins: determinants of digitalis-NKA receptor internalization. Ohio Valley Society of Toxicology, Annual Meeting, Indianapolis, IN, October 28th, 2016.


Joshua L Stricker, Norma C. Adragna, and Peter K Lauf. Immuno-cytochemical exploration of interaction between Na/K ATPase (NKA), Bcl-2 (BclXI) and other proteins: determinants of digitalis-NKA receptor internalization, Ohio Physiological Society 31st Annual Meeting, Ohio State University, Columbus OH, November 19, 2016. Poster # 66.

Dr. F. Javier Álvarez-Leafmans
Invited Seminar Speaker. Center for Biomedical Technology, Polytechnic University of Madrid, Spain. “Possible role of the Na+K+2Cl- cotransporter 1 (NKCC1) of choroid plexus epithelial cells as a sensor and regulator of cerebrospinal fluid potassium concentration.” 06/09/2016. Host: Professor Javier de Felipe.

Invited Symposium Speaker (July 9, 2016). Symposium “Transport Proteins and Cellular Signaling in Choroid Plexus Epithelia” sponsored by the American Physiological Society, Experimental Biology 2017, Chicago III (organized by Jeppe Praetorius, Aarhus University, Denmark and Bonnie L. Blazer-Yost, Indiana University School of Medicine, USA). To be held during The Experimental Biology Meeting in Chicago, IL, April 22-26, 2017.

Dr. Ji Bihl
Bihl J. “Integrative Researches for Cerebrovascular Diseases”, Department of Biomedical Sciences, Marshall University, September 13, Huntington, WV
**Dr. Khalid Elased**  
Poster presentations at the American Nephrology Association Annual Meeting

**Dr. Terry Oroszi**  
Oroszi, T., (Aug. 2016) – Domestic Terrorism Presentation, Wright State University, Beavercreek, OH. (2 sessions, AM and PM, (~100 attendees))


Oroszi, T., (March 2016). Power: Perspective, Platforms, and Paradigms., (Introducing my 4-5-6 Power Platform) WSU’s Power and Leadership Staff Development Day., Wright State University, Beavercreek, OH. (2 sessions, AM and PM, (~100 attendees))


Oroszi, T., (February 2016). Keynote speaker, Defense Institute Study and Education (IDSE) Military Supply Chain Workshop. Wright State Foundation, Wright State University, Beavercreek, OH.

Oroszi, T., (February 2016). Friends of the Library Lecture Series, Weapons of Mass Psychological Destruction (>100 attendees) Wright State University, Beavercreek, OH.

Oroszi, T., (February 2016). Americans’ Participation in Islamic Extremism. 4 Hour Workshop, Advanced Technical Intelligence Center (ATIC), Beavercreek, OH.

**Dr. Ravi Sahu**  
6th Global Summit on Toxicology and Applied Pharmacology (844th Conference) held on October 17-19, 2016 at Houston, Texas, USA

2nd International Conference and Exhibition on Antibodies on “The New Era of Antibody Research and Therapy” held on July 11-12, 2016 at Philadelphia, PA, Moderator

**Dr. Richard Simman**  

“Pressure Wounds Management, Closure with Flaps and Grafts.” The American College of Surgeons Annual Clinical Congress. October 17, 2016. Washington DC Convention Center

“Use of Esterified Hyaluronic Acid Wound Matrix in Wound Bed Preparation, a Case.” Series, Fall SAWC meeting. Medline, at Carmines at Caesars Palace. October 7, 2016. Las Vegas, NV


Use of Hyaluronic Acid Based Biological Bilaminar Matrix in Wound Bed Preparation. Central Research Forum, Wright State University Student Union. Dayton, Ohio, October 13, 2016

The Role of Extracellular Microvesicles in Wound Healing. Central Research Forum, Wright State University Student Union. Dayton, Ohio, October 13, 2016

A Rare Case of Cutaneous Angiosarcoma of the Lower Extremity in an Elderly Patient. The Ohio Dermatology Association meeting on September 30, 2016 in Columbus, Ohio

“Treating Chronic, Non-Healing Wounds” Wright State University, Department of Dermatology, Grand Rounds. Dayton, Ohio. February 26, 2016

**Dr. Courtney Sulentic**  
Participant in Panel Discussions
The Career Roundtable: Opportunities in Toxicology Session. Committee on Diversity Initiatives, Society of Toxicology, New Orleans, LA, 2016

The Slow Professor: Challenging the Culture and Speed in the Academy, Wright State University, Book group moderator

Resume Workshop for Graduate and BioSTAR Students, Wright State University, Organizer and facilitator, Guest Speakers: Lisa Navarro, PhD, DABT, ERT, Givaudan Flavors Corp. and Elizabeth Cotton, Human Resources Director, Givaudan Flavors Corp.

Student Oral Presentations (*trainee presenter from Sulentic lab):


*Snyder, A., Sulentic, C. E. W.: Utilizing CRISPR/Cas9 to study the immunoglobulin heavy chain 3’ regulatory region. Celebration of Research, Scholarship, and Creative Activities, Wright State University, Dayton, OH, 2016.


Student Poster Presentations:

*Snyder, A., Panstingel, Abdullah, S., Sulentic, C. E. W.: Reducing the number of hs1.2 invariant sequence repeats in the 3’ immunoglobulin heavy chain regulatory region alters Ig expression. Toxicological Sciences, the Toxicologist, 150:1938, 2016.

*Buckner, C., Snyder, A., Abdullah, S., Sulentic, C. E. W.: Functional characterization of the polymorphic hs1.2 enhancer using CRISPR/Cas9 gene editing and nanopore sequencing technology. Ohio Valley Society of Toxicology, Eli Lilly and Company, Indianapolis, IN, 2016.


*Snyder, A., Sulentic, C. E. W.: Reducing the number of hs1.2 invariant sequence repeats in the 3’ immunoglobulin heavy chain regulatory region alters Ig expression. Women in STEMM Leadership Institute Research Symposium, Wright State University, Dayton, OH, 2016.


*Abdullah, S., Sulentic, C. E. W.: Effect of CRISPR-mediated genetic edits of the hs1.2 enhancer on ε IGH expression in U266 cells. Central Research Forum, Boonshoft School of Medicine, Wright State University, Dayton, OH, 2016.


*Alhamdan, N., Sulentic, C. E. W.: Role of the AhR antagonist in human immunoglobulin expression and interaction with other cytosolic signaling proteins. Central Research Forum, Boonshoft School of Medicine, Wright State University, Dayton, OH, 2016.

*Crabb, G., Burra, K., Snyder, A., Sulentic, C. E. W.: The effects of TCDD on IgE heavy chain expression in a U266 plasma cell line. Central Research Forum, Boonshoft School of Medicine, Wright State University, Dayton, OH, 2016.


**Dr. Jeffrey Travers**
Colorado Dermatology Society annual meeting, Denver, Colorado. Dr. Lewis Memorial Lecturer. “Preventing aging-associated non-melanoma skin cancers by cosmetic wounding therapies: There’s gold in those golden years!” May, 2016.


**Other recognition** [e.g. editorships, reviewer awards]

**Dr. Norma Adragna**
Editorial Board: Cellular Physiology & Biochemistry, Karger, Switzerland. Regular reviewer for > 20 scientific journal in my area of expertise

**Dr. F. Javier Alvarez-Leefmans**

Ad hoc reviewer for the following journals:
Biographical Memoirs of the Fellows of the Royal Society
Frontiers in Cellular Neuroscience
Journal of Neuroscience
American Journal of Physiology (cell)
PLOS Computational Biology

**Dr. Ji Bihl**
Reviewer for journals: Cellular and Molecular Neurobiology (6)
Scientific Report (1)

**Dr. Mauricio Di Fulvio**
Ad-hoc reviewer NIH-NIDDK, Diabetes, Endocrinology, and Metabolic Diseases B Sub-Committee (DDK-B).

**Dr. Khalid Elased**
Reviewer of the following Journals:
Advances in Critical Care
American Journal of Physiology: Heart and Circulatory Physiology
American Journal of Physiology: Renal Physiology  
BMC Nephrology  
Brazilian Journal of Medical and Biological Research  
Cellular & Molecular Biology Letters; Circulation  
Circulation Research; Clinical and Experimental Hypertension  
Clinical and Experimental Pharmacology & Physiology; Endocrine  
Experimental Diabetes Research; Experimental Physiology  
Hypertension Research; International Journal of Biological Macromolecules  
International Journal of Hypertension; International Journal of Nephrology and Renovascular Disease  
Journal of Diabetes Research  
Journal of Proteome Research; Journal of the American Society of Hypertension  
Kidney and Blood Pressure Research  
Life Sciences  
Metabolism- Clinical and Experimental  
Microbial Pathogenesis  
Molecular Psychiatry  
Nephron Physiology  
PLoS One  
Regulatory Peptides

Research Peer Review: National American Heart Association (AHA) Cardiac Biology Study Group,  

Dr. Saber Hussain  
Editorial Positions  
Journal: NANOIMPACT, 2015-presents

Professional Memberships and Affiliations  
Italian Society of Nanotoxicology  
Society of Toxicology  
Association of Government Toxicologists

Reviewer For Journals  
Toxicological Sciences, 2007-present  
Toxicology Letters, 2005-present  
Toxicology In Vitro, 2007-present  
Journal of Toxicology and Environmental Health, 2007-present  
International Journal of Nanomedicine, 2007-present  
International Journal of Toxicology, 2007-present  
Food Chemical Toxicology, 2007-present  
International Journal of Nanomedicine, 2007-present  
Langmuir, 2008-present  
Nature Nanotechnology, 2008-present  
Reviewer, Carbon, 2006-present  
Reviewer, Journal of the American Chemical Society, 2008-present  
Reviewer, Advanced Materials, 2008-present  
Reviewer, PNAS, 2010-present

Dr. Ravi Sahu  
I am serving as an Editorial Board Member and/or adhoc Peer Reviewer for over 45 scientific journals including Autophagy, Carcinogenesis, Cancer Growth and Metastasis, European Journal of Inflammation, International Journal of Immunopathology and Pharmacology, Journal of Cell Death, Mediators of Inflammation, Molecular Cancer Research, Oncotarget, Oncogenesis, Photochemistry and Photobiology, World Journal of Immunology, World Journal of Translational Medicine etc.

I received Travel Award from 2nd International Conference and Exhibition on Antibodies “The New Era of Antibody Research and Therapy” held at Philadelphia, PA.
**Dr. Richard Simman**  
Chair, Sixth Annual Symposium on Advancing the Standards in Wound Care, and Hyperbaric Medicine, ACCWS. Sinclair Community College, Dayton, Ohio. Oct 28, 2016

Course Director, Back to Basic Wound Care Course, ACCWS. Sinclair Community College, Dayton, Ohio. Oct 29, 2016


**Dr. Courtney Sulentic**  
Women in Science Giving Circle Faculty Grant Awardee

Grant Review Panels  
National Institute of Environmental Health Sciences, P42 Superfund Research Program, Special Emphasis Panel/Scientific Review Group ZES1 LKB (S)

Student Awards  
Nicole Panstingel, Best M.S. Poster Presentation, Ohio Valley Society of Toxicology meeting, Eli Lilly, Indianapolis, IN

Nicole Panstingel, Dermal Toxicology Specialty Section Graduate Student Award, Society of Toxicology meeting, New Orleans, LA

Siham Abdullah2nd place M.S. Poster Presentation, Ohio Valley Society of Toxicology meeting, Eli Lilly, Indianapolis, IN

**Dr. Jeffrey Travers**  
Grant Study Sections  
VA Oncology E Review Panel (chair) 12-2015  
VA Promotions Committee (RCSR 1 Workgroup) 2016  
NIAMS T32 Review (ZAR1 YL M1) 10-2016  
Arthritis Connective Tissue, and Skin (ACTS) permanent member  
-meetings 2-1016, 6-2016, 10-2016

Journal Reviewer (2016)  
-Expert Review of Clinical Dermatology  
-Journal of Investigative Dermatology  
-Nature  
-Oncotarget

Editorial Board:  
Inflammation & Allergy – Drug Targets  
Clinics in Oncology (Melanoma/Skin Cancer section)

Reviewer for the following Journals in 2016  
Experimental Dermatology  
Expert Review of Clinical Dermatology  
Free Radical Biology and Experimental Medicine  
Journal of Investigative Dermatology  
Nature  
PLOS-one  
Photochemistry and Photobiology

**Dr. Yongjie Xu**  
Proceedings of the National Academy of Sciences of USA, ad hoc reviewer  
Frontiers in Cell and Developmental Biology, ad hoc reviewer  
Genetics, ad hoc reviewer
6

Summary of Service Activities

Student advising

**Dr. Norma Adragna**
Praveen Alla, Master’s Student, MS, Advisor, 2014-graduated, Fall, 2016
Joshua Stricker, MS, Advisor, 2015-2016
Vamsi A. K. Chandu, MS, Advisor, 2015-present
Nedu C. Ihezurike, MS, Advisor, 2015-present
Aprana K. Poluparthi, MS, Advisor, 2016-present
Chandra Maharjan, MS, Co-Advisor, 2014-2016, graduated 2016
Joshua Stricker, MS, Co-Advisor, 2016-present
Lamai Abdulrahman Alsulaiman, MS, Co-Advisor, 2015-2016
Gousia Begum, MS, Co-Advisor, 2016-present
Nedu C. Ihezurike, MS, Rotation Advisor, 2016
Aprana K. Poluparthi, MS, Rotation Advisor, 2015-present
Gousia Begum, MS, Rotation Co-Advisor, 2016
Faten bin Dayel, MS, Rotation Advisor, 2016
Shesha Lakshmi Arathi Paluri, BMS Student, Committee Member, 2011, 2013-present
Terry L. Oroszi, EdD Degree, Committee Member, 2016
Shrouq Almaghrabi, MS, Advisor, Fall 2016
Thulasi Ram Konduru, MS, Advisor, Fall 2016
Sachchida Subedi, MS, Advisor, Fall 2016
Srinivasula Reddy Chinnapareddy, MS student, Advisor, Spring, 2016
Suhasini S.S. Perumalla, MS student, Advisor, Spring, 2016

**Dr. F. Javier Alvarez-Leefmans**
Vishal Faldu, MS Electrical Engineering, trained on quantitative analysis of digital imaging
Jeannine Crum, PhD, 9th year, BMS
Aaron Madaris, MS Biomedical Engineering.

**Dr. Ji Bihl**
Katherine Fahy, master student, project “Thermal Injury Induced Release of MVPs from Keratinocytes”, 2015-2017 (Mentor: Jeffrey Travers)
Sayali Dharmadhikari, MS Student, 2014-2016 (Mentor: Adrian M. Corbett)

**Dr. Yanfang Chen**
Qinmao Ye, MS, thesis director, 2016-present
Jinju Wang, PhD
Xiang Xiao, PhD
Yue Wang, visiting scholar
Qian Cheng, visiting scholar
Apri Arnold Daubenspeck, PhD thesis committee
Abdelfatah Abou Issa, MS, thesis committee, graduated 2016

**Dr. David Cool**
Ravina Ashtapure, MS, thesis directorGraduated 2016
Faten Bin Dayel, MS, Advisor-leadership
Anas Sergiwa, MS, Advisor-leadership
Bishal Marasini, MS, Advisor-leadership
Walid Mari, MS, thesis committee, projected graduation 2016
Abdelfateh Abou Issa, MS, thesis committee, graduated 2016
Siham Abdul, MS, thesis committee, projected graduation 2016
Katy Fahey, MS, thesis committee, projected graduation 2017
Brian Stogsdill, PhD, thesis committee, projected graduation 2017
Mahmoud Alghamri, PhD, thesis committee, graduated 2016
Yirong Zhou, PhD, thesis committee, projected graduation 2018
Jenny Jurcsisin, PhD, thesis committee, projected graduation 2019

**Dr. Khalid Elased**
Rucha Fadnavis, MS, thesis director projected graduation 2017
Ravina Milind Ashtaputre, MS, thesis committee, graduated 2016
Xiang Xiao, PHD, thesis committee, projected graduation 2017

**Dr. Saber Hussain**
Shar Qureshi, MS, thesis director
Lt. Behm, MS, thesis director
Nicole Panstingel, thesis committee
Eight (8) summer students conducted summer rotation/internship

**Dr. Terry Oroszi**
Fall 2015 MS Students (Second year):
Alabdrabalnabi, Eman
Andijani, Yusra
Khan, Aiman
Momenah, Tahani
Subedi, Sachchida
Almutairi, Fahdah
Chinnapareddy, Srinivasula
Egbai, Paulet
Greene, Matthew
Ihezurike, Nedu
Karri, Bala
Kassem, Sara
Kumbaji, Meenasri
Law, Rebecca
Law, Sarah
Motharapu, Rajitha
Sen, Ebru
Sharma, Shriya
Sheela, Suhasini
Tabal, Najib
Timmisetty, Muralikrishna
Tosun, Amanda
Yones, Marwa
Zhang, Cheng

Fall 2016 MS Students (First Year):
Hawra Al Khlaifeet
Shrouq Almaghrabi
Haya Alrajeh
Tahani Alshammari
Faten Bin Dayel
Sanjeev Dhakal
Rupinder Gill
Sindhu Kommareddy
Thulasi Konduru
Purna Koppu
Wedad Mawkili
Sowmya Podduturi
Mohammed Samee
Thesis Director
Dr. Ravi Sahu
Jeremiah Saylee, MS, projected graduation 2017
Bishal Maracini, MS, projected graduation

**Dr. Richard Simman**
Sami Gamaleddin, MS, 2015-present
Sani Sabri, 2016-present
Walid Mari, MS, projected graduation 2017

**Dr. Courtney Sulentic**
Andrew Snyder, BMS, PhD, thesis director, defended spring 2016
Rebecca Law, MS, non-thesis research project, graduated 2016
Zahra Jassim Alfaheeda, Microbiology/Immunology M.S., thesis director, defended spring 2016
Nicole Panstingel, Pharm/Tox M.S., thesis director
Sibham Abdulla, Pharm/Tox M.S., thesis director
Nasser Alhamdan, Microbiology/Immunology M.S., thesis director
Clayton Buckner, Microbiology/Immunology M.S., thesis director
Jennifer Rubio, visiting intern from Cal Polytech, summer 2016
Amanda Hanes (BMS representative), BMS, Ph.D., thesis committee
Sumeet Poudel, BMS, Ph.D., thesis committee
Kevin Novak, (BMS representative), BMS Ph.D., thesis committee
Tu Thien Danh, BMS Ph.D., thesis committee
Sumeet Poudel, BMS Ph.D., thesis committee
Todd Lewis, BMS Ph.D. (BMS representative), thesis committee
Denise Kramer, BMS Ph.D., thesis committee
Caitlin Persin, Microbiology/Immunology M.S., thesis committee, defended summer 2016
Mary Thompson, Microbiology/Immunology M.S., thesis committee, defended summer 2016

**Dr. Jeffrey Travers**
Katherine Fahy, MS, thesis director, projected graduation 2018
Langni Liu, PhD, thesis director, 2016-present
Walid Mari, MS, thesis committee, projected graduation 2017
Nicole Panstingel, thesis committee, projected graduation 2017
Chien Poon, thesis committee, projected graduation 2017
Xiao Zhang, PhD, thesis committee, 2015-present
James Reader, PhD, thesis committee, 2015-present
Prakash Arumugan, MD/PhD, thesis committee, 2015-2016, graduated
Ann Collier, PhD at Indiana University, thesis committee, 2013-present

**Dr. Yongjie Xu**
Hongbin Dong, PhD fellow
Michal Wozniak, PhD fellow
Raisa Siddique, undergraduate
Merlyn Jeanty, STREAMS, SUNY College at Oneota, New York
Sumeet Poudel, BMS/PhD student
Todd Lewis, BMS/PhD student
Marcus T. Grant, MS student, BMB
Elliot Hayden, MD/PhD student, COSM

**Committee membership/officer** [indicate if committee chair]

**Wright State University Boonshoft School of Medicine** (or college name)

**Wright State University Boonshoft School of Medicine** [or college name]

**Dr. Norma Adragna**
P&T Faculty Affairs and Development Committee 2000-March 2013, 2015-present, Chair.
Morris Symposium, Organizing Committee Member, 2013-present

**Dr. F. Javier Alvarez-Leefmans**
Member, Faculty Affairs & Development Committee, Pharm/Tox
Faculty Senator, BSOM Constituency for 2015-2017 Academic years.

**Dr. David Cool**
Faculty Promotion and Advancement (FPAC) Committee, 2014-2016
Dr. Khalid Elased
Student Advising, MS, Pharm/Tox, 2016
WrightQ writing group, BSOM

Dr. Terry Oroszi
Faculty Senate Ad Hoc Committee, International Education
Ad Hoc Retreat Committee: Mentor and Marketing, Pharm/Tox
Ad Hoc Retreat Committee: Curriculum, Pharm/Tox
Ad Hoc Committee: Retreat Follow-up, Pharm/Tox
Applications Committee, Pharm/Tox
Retreat Facilitator/Emcee Department Education Retreat, Pharm/Tox

Dr. Ravi Sahu
Student Scholarship Committee, Pharm/Tox
Admissions Committee, Pharm/Tox

Dr. Courtney Sulentic
Research Committee, elected member, BSOM, 2014-2016
Faculty Curriculum Committee, BSOM, 2013-2016
Curriculum Development, Foundation of Clinical Medicine Subcommittee
LCME re-accreditation subcommittee 4, Ed. resources and infrastructure and Curricular content, 2015-2016
Executive Committee, elected member, BSOM, 2014-2015
Pathobiology and Therapeutics Steering Committee, BSOM
Medical Student Research Symposium Poster Judge, BSOM
Faculty Affairs and Development Committee (FADC), Pharm/Tox
Faculty Work Equity Committee, Pharm/Tox
Dr. Jeffrey Travers
BSOM Executive Committee
Dean’s Research Chairs Committee
LCME Curriculum Committee

Wright State University

Dr. Norma Adragna
Women in Sciences Giving Circle Faculty Awards Committee, 2015-present.

Dr. F. Javier Alvarez-Leefmans
Alternate Member. Laboratory Animal Care and Use Committee (LACUC).
Member, IACUC appointed by the Department of Veterans Affairs. Term 01/15/15 through 12/31/17.
Committee Member, appointed by Provost Thomas A. Sudkamp
Member, Confidential Research Misconduct Investigation Committee RSP-NSF.
Member, Biomedical Sciences PhD Program Admissions Committee. 2014-2016

Dr. David Cool
BioMedical Sciences Program (BMS) Admissions Committee, 2015- present
BioMedical Sciences Program (BMS) Integrative Toxicology Track, 2015- present
Workload Equity & Merit Committee (Pharm/Tox), 2015-present
Comprehensive MS Program Review Committee Pharm/Tox), 2015-present
Faculty Affairs and Development Committee, 1998-present
Faculty Senate Pre-requisite Check Committee (WSU), 2015-2016

Dr. Mauricio Di Fulvio
Students Admission's Committee, Pharmacology & Toxicology, BSOM
Scholarship Committee, Pharmacology & Toxicology, BSOM
Nomination Committee, BMS Program

Dr. Ravi Sahu
Institutional Animal Care and Use Committee (IACUC)
Institutional Biosafety Committee (IBC)

Dr. Courtney Sulentic
Women’s Peer Mentoring Group, initially supported by the NSF-funded LEADER Program at WSU
Radiation Safety Committee, 2005-present; Chair, 2013-present
Academic Policies Committee, appointed member, 2016-2017
Women in Science Giving Circle member and Women in STEMM Leadership Institute Mentor

Dr. Jeffrey Travers
Graduate Program Academic Policies Committee

Wright State Physicians

Dr. Jeffrey Travers
Laboratory Committee, WSP

Hospital or affiliated institution [name]

Dr. David Cool
OB/GYN Translational Reproductive Health Research Grant Committee, 2014- present
Judge- MVH Resident Research Day- OB/GYN, 2005-present

State

Dr. Norma Adragna
Poster Judge, Ohio Valley Society of Toxicology, Annual Meeting, Indianapolis, IN, October 28th, 2016.
Poster Judge, Ohio Physiological Society 31st Annual Meeting, Ohio State University, Columbus OH, November 19, 2016.

Dr. Saber Hussain
Affiliated mentor for Dayton Area Graduate Studies (DAGSI)

Dr. Ravi Sahu
Choose Ohio First Proposals, Department of Higher Education, reviewer

National

Dr. Norma Adragna
Session Chair, 11TH International Congress, Cell Volume Regulation and fluid Homeostasis: Implications for Hydration and Nutrition in Health and Disease, Chicago, IL, August 15, 2015.

Dr. F. Javier Alvarez-Leefmans
Ad Hoc Reviewer of Grant application for the Medical Research Council, UK.

Dr. Mauricio Di Fulvio
Basic cell genetics and epigenetics (GE) 3 Peer Review Study Group, American Heart Association (AHA)

Dr. Khalid Elased
AHA High Blood pressure Council Conference Review Committee
Appointed delegate of WSU BSOM to the United States Pharmacopeia (USP) Convention.

Dr. Terry Oroszi
Homeland Security Information Network
NBC Industry Group (Washington, D.C.)

Dr. Ravi Sahu
Review manuscripts and perform editorial services for various national and international scientific journals.

Dr. Richard Simman
Dayton Think Tank: Crisis/Threat/Disaster/Emergency Management Team, 3/2016 - present
Journal of Surgery and Operative Care. Editorial Board, 1/15 – present
Review Board, Journal of Saudi Medicine, 2013- present
Editor in Chief, Journal of the American College of Certified Wound Specialists, 10/09 - present
Editorial Board, Annals of Plastic Surgery, 4/09 - present
Chair, Board Examination Committee for Physicians(CWSP), The American Academy of Wound Management
Board Examination in Wound Care, 1/08 – present
Member of the Medical Science Monitor International Reviewers Panel (IRP), 2006 – present

Dr. Courtney Sulentic
Awards Committee, elected member, co-Chair, Society of Toxicology
Undergraduate Strategy Work Group/Task Force, appointed member, Society of Toxicology
Mentor Match program, Society of Toxicology, Alicia Taylor, PhD, Post-doc at Univ. of California, Berkeley
Invited Expert, Colgate-Palmolive Luncheon, SOT Annual Meeting
Ad-hoc reviewer for several journals

Dr. Jeffrey Travers
Member, Advisory Board, Christian Doppler Laboratory on Biotechnology of Skin Aging, Department of Biotechnology, BOKU-University of Natural Resources and Life Sciences, Vienna, Austria (2014-present).

Other

Dr. F. Javier Alvarez-Leefmans
Member of the Stanley Allyn Society. (11/17/16) The Heritage Societies Wright State University. The Stanley Allyn Society recognizes cumulative giving of $25,000.00 and is named in honor of Stanley Allyn, one of the founders of Wright State University

Dr. David Cool
NIH R21 AR070010, Sulentic/Travers (PI), Funded Consultant, 2016-2018
Director of the Proteome Analysis Laboratory- UnPaid Position, 2004-present

Collaborations & Consultants
Dr. Ray Bahado-Singh, Beaumont Health Research Center, MI., Proteomics, 2016- present
Dr. Steven Lindheim OB/GYN Neu(5)GC in Infertility, 2015- present
Dr. John Bini & Dr. Steve Burdette, MVH, Dept.Surgery, Aerosolized Antibiotics in the Treatment of Ventilator Associated Pneumonia, 2014- present
Dr. Richard Simman, P&T Dept, Comparison of wound healing using OASIS. 2014-present
Dr. Steven Lindheim OB/GYN, Polycystic Ovary Syndrome, 2014- present
http://clinicaltrials.gov/ct2/show/study/NCT01487486
Dr. Jerry Yaklic, OB/GYN, Translational research of OB/GYN diseases, 2013-present
Dr. Larry Arlian & Dr. Marge Morgan WSU Biology Dept Scabies: Biology, Culture, Host Specificity and Antigens 2011- present
Dr. Matthew Peterson (Lifespan) Aging, Exercise and diet. 2015- present
Dr James Olson- (Emerg. Med) Biomarkers of Stroke damage. 2007- present
Dr Miryoung Lee- (Lifespan) Analysis of biomarkers of dieting, 2013- present
Dr. John Miller & Dr. Lucy Wrenshall- NCBP & Dept of Surgery- Purification of IL-2 and analysis of dimerization 2011-present
Dr. James Olson- Emergency Medicine & NCBP Osmotic Regulation of the Neuronal Taurine Transporter. Ongoing Research Project, 2003- present
Dr. Mike Hennesy- Dept of Psychology, Wright State University- NSF Grant Application “Mechanisms mediating social buffering of hypothalamic-pituitary-adrenal responses”, 2010-present
Dr. Gary Ventolini, Biomarkers of Vulvodynia, MVH Dept of OB/GYN MFM 2008- present

Dr. Yanfang Chen
Study Section, American Diabetes Association (ADA), 2016
Ad Hoc member, National Institute of Neurological Disorders and Stroke (NINDS), 2016
Oversea Reviewer, National Natural Science Foundation of China (NSFC), 2016
Guest Editor, Stem Cell International, 2016
Abstract grader for Annual Scientific Conference of American Heart Association, 2016
Editorial board for journals: America Journal of Cardiovascular Disease, CNS; Neurosciences and Therapeutics, World Journal of Hypertension

Dr. Khalid Elased
Member of the Editorial Board of the Journal of Diabetes Research
Member of the Editorial Board of World Journal of Hypertension (WJH).
Member of the Editorial Board of World Journal of Cardiology (WJC).
Member of the Editorial Board of SAJ Pharmacy & Pharmacology
Member of the Journal of Nephrology Research

Scientific Society
American Diabetic Association (ADA)
Fellow of the American Heart Association (AHA)
European Association for the Study of Diabetes (EASD)
American Society for Pharmacology and Experimental Therapeutics (ASPET)
Member of the American College of Clinical Pharmacy (ACCP)
Member of the American Physiological Society (ASP)
Member of the American Society of Nephrology (ASN)
Delegate of the WSU BSOM to the United States Pharmacopeia

Dr. Saber Hussain
Defines, leads, and manages multiple branch Nanotoxicology and Nanobioeffects technical activities, programs and personnel in an independent manner.

Supervise and manage 15-member team—DoD pioneers in nanotoxicology (noted through publications) and research

Plan to consider for 1 MS students from Pharm/Tox. Currently two MS Student (Shar Qureshi and Lt Behm)) is working in nanotox area. Collaborative project is under discussion in collaboration with Dr Jeffrey Travers— "PAF modulation and inflammation response in skin cells during NPs exposure"

Long term plan to assist Pharm/tox to establish area of expertise as center of excellence in nanobio/nanomedicine that provide great opportunities for students and young faculty.

Working with Dr Terry Oroszi to establish collaboration between AFRL and WSU through different programs

Discussing with Dr Simons for collaborative project – there is potential PhD student may work in this project.

Dr. Terry Oroszi
Belgium Military, consultant on crisis decision making.

Subject matter expert, Society for the Advancement of Disaster Nursing (SADN)

Sept. 20, 2016: Dayton Daily News, Front page and WHIO radio. “Instilling Fear is goal of attacks expert says”
July 19, 2016: TV/NEWS. CREATION OF A DAYTON THINK TANK - Dayton Think Tank Crisis, Threat, Disaster & Emergency Management, Dayton’s top leaders… Fox 45, Dayton Ohio

July 8, 2016: TV/NEWS. DALLAS SHOOTING, ACT OF TERROR? ABC WCPO Dallas Sniper, as an expert on terrorism, two different TV broadcasts from one interview.
http://mms.tveyes.com/Transcript.asp?StationID=2045&DateTime=7%2F8%2F2016+6%3A02%3A30+PM&Term=Wright+State&PlayClip=TRUE


Executive Director, Simman Wound Fellowship Board

Founder, Dayton Think Tank (Membership includes 4 local Mayors and several Dayton govt leaders, 2 WPAFB Colonels, UD, WSU, and Industry experts)

CEO, TRAC Consulting Group, (includes members identified as experts from FBI, Govt, Military, and Academics)

**Dr. Yongjie Xu**
Alex Xu, summer research, Centerville high school student

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**Patient Care Summary**

[If applicable. Include number of ambulatory visits, hospitalizations, surgeries, new techniques or programs developed; new collaborations.]

**Dr. Richard Simman**
Kettering Medical Center, Dayton, Ohio – active
Sycamore Hospital, Miamisburg, Ohio – active
SOIN Medical Center, Dayton, Ohio – active
Good Samaritan Hospital, Dayton, Ohio – active
Good Samaritan North Health Center, Dayton, Ohio – active
LifeCare Hospital, Miamisburg, Ohio – active
Kindred Hospital, Dayton, Ohio – active

**Dr. Jeffrey Travers**
Dermatology Clinics
-Weekly dermatology clinic at WSP clinic in the WSU Department of Dermatology
-Weekly dermatology clinic at Dayton VAMC

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**Honors and awards** [Faculty or staff]

**Dr. Mauricio Di Fulvio**
Research showcased as best images in endocrinology and his image is on the cover of Journal of Endocrinology, January 2016.

**Dr. Terry Oroszi**
Represented the USA at the United Nations Workshop on Terrorism

**Dr. Courtney Sulentic**
Received the Ohio Valley Society of Toxicology Distinguished Service Award and was elected to the Society of Toxicology Awards Committee.
Hosted events [CME, etc.]

Other information

[Other information that represents your department’s contribution to the academic mission of the Boonshoft School of Medicine.]

Dr. Norma Adragna
Invited P&T seminar guest speakers:
Dr. Martha E. O’Donnell, Ph.D., Professor, Dept of Physiology and Membrane Biology, University of California.
Dr. V. Gustavo Blanco, M.D., Ph.D., Professor, Kathleen M. Osborn Chair, Dept of Molecular & Integrative Physiology, University of Kansas Medical Center.

Member of 10 Scientific Societies.
Reviewer of > 20 Scientific Journals.
Development of new field of research.
Preparing new courses in my field of expertise, old and newly acquired.

Dr. Yanfang Chen
Master’s Program Admission Committee
Master’s Program Scholarship Committee

Dr. David Cool
Editorial Board, Interdisciplinary Toxicology, 2014-present
Editorial Board, Journal of Environmental Immunological Toxicology, 2012-present
NIH CounterAct Study Section Member Molecular, Cellular & Developmental Neurosciences Integrated Review Group, R21 Study Section Reviewer (07/08/16).
CDMRP-DOD Gulf War Illness Epidemiology & Biomarkers Grant Review Panel (January 6-8, 2016)

Dr. Terry Orozi
NBC Industry Group Washington DC (WSU is the only academic institution).
Annual Dayton MMRS Steering Committee meeting (Restricted due to topics).
Dayton Think Tank (Crisis, Threat, Emergency and Disaster Management).
High Stakes Decision-making presentation at SAFE Symposium.
WSRI Meeting to discuss the creation of a Center of Excellence in Homeland Security and Terrorism.
Attended a mandatory counterintelligence briefing (WPAFB).
Power Platform 2 hour workshop for INFORMS Engineering Symposium.
Led a Terrorism Case Studies 3 hour Workshop for Advanced Technical Intelligence Center (ATIC) Analyst Bootcamp.
Power Platform 2 hour workshop for Advanced Technical Intelligence Center (ATIC) Analyst Bootcamp.
Led a Terrorism 4 hour Workshop for Advanced Technical Intelligence Center (ATIC) Analyst Bootcamp.
Power Platform workshop for BioStar Students.
Terrorism Workshop specific to Dayton, Oakwood, and Cincinnati Police, 4 hours.
Mindset of a Terrorist, terrorism workshops (am & pm for WSU Staff employees.)
WSRI Meeting to discuss the creation of a Center of Excellence in Homeland Security and Terrorism.
WDTN/FOX 45 TV News interview.
One of the leads for an Active Shooter Scenario involving VA/Dayton/Fairborn Police, SWAT, Hostage
Negotiations.
TV interview, Dallas Shooting. Terrorism.
FBI Biosecurity workshops, one of the leads.
Led a 4 hour Terrorism Workshop for Advanced Technical Intelligence Center (ATIC) Analyst Bootcamp.
Abstract for OSHA Grant submitted.
Abstract for SAFEASSOCIATION National Meeting (military) submitted.
FBI Chemical/Explosive training, invited to participate (and blow things up!)
Invited Speaker Centerville Public Library, terrorism, >100 people in attendance.
Rotary Club invited speaker, terrorism.
Meeting with Dayton Mayor on Think Tank and 4/5/6 Power Platform.
Awarded a Doctorate Degree, Dissertation topic “High Stakes Decision-Making”
Fox 45/ABC 22 TV interview on the closing of Guantanamo Bay Prison (GITMO), Cuba.
Attended FBI brief on Homegrown Terrorism
Presented 2 workshops to the Staff Development day (total 92 attendees) 4/5/6 Power Platform.
Muscatine, IA Journal Published Article “Muscatine Native Examines the Psychological Impact of Terrorism.”
Keynote speaker, Defense Institute Study and Education (IDSE) Military Supply Chain Workshop.
Presented a half day workshop on domestic terrorism for ATIC Analysis Bootcamp Students looking to get into the intelligence arena.
Led a lecture (100+ attendees) on the psychology behind the use of WMDs and terrorism.
Attended an international conference on simulations, WSU took home an award (#1) on Sim games; VA SimLEARN was #2. Workshops attended included 2 on qualitative methods some used in this research, and TED talks.

Dr. Ravi Sahu
Faculty Judge, Resident research forum at Wright State University

Dr. Jeffrey Travers
Direct the Pharmacology Translational Unit which conducts translational human studies (funded by NIH and VA), as well as pharmaceutical company sponsored studies.

Dr. Yongjie Xu
Member, Pharm/Tox MS program marketing committee
Member, Curriculum committee, BMS PhD program