



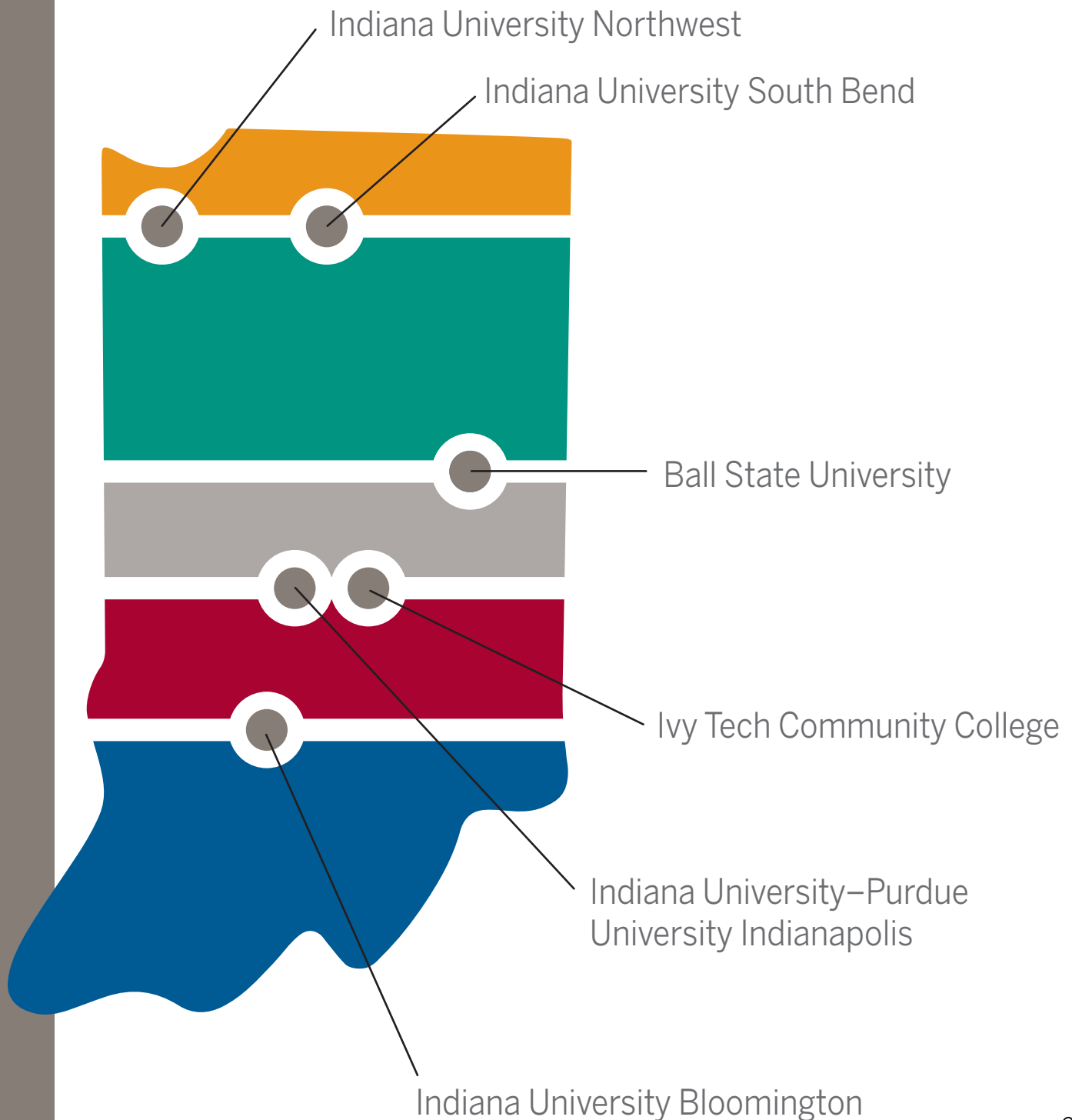
IN LSAMP Undergraduate Research Poster Session

Welcome to the inaugural IN LSAMP Undergraduate Research Poster Session!

We are pleased you are joining us to celebrate this collection of undergraduate research being hosted at our partner institution, Ivy Tech Community College.

We also extend a warm welcome to the undergraduate students presenting from the KY WV LSAMP. We look forward to sharing resources across the Midwest through our partnership with the Louis Stokes Midwest Regional Center of Excellence (LSMRCE) and growing a tradition of engaging across our state borders. Let us celebrate the accomplishments of our students and join together to support broadening participation of underrepresented minority students in STEM by supporting their research through your investment of time and interest in their research.

This poster session will spotlight undergraduate research conducted by IN LSAMP scholars across five of the IN LSAMP campuses: Indiana University Bloomington, Ball State University, Indiana University Northwest, IUPUI, and Indiana University South Bend. Additionally, scholars from Ivy Tech Community College were welcomed into labs at IUPUI. Research was conducted under the guidance of our IN LSAMP faculty mentors alongside graduate students in state-of-the-art laboratories. Today approximately 43 undergraduate research posters will be showcased from six institutions.



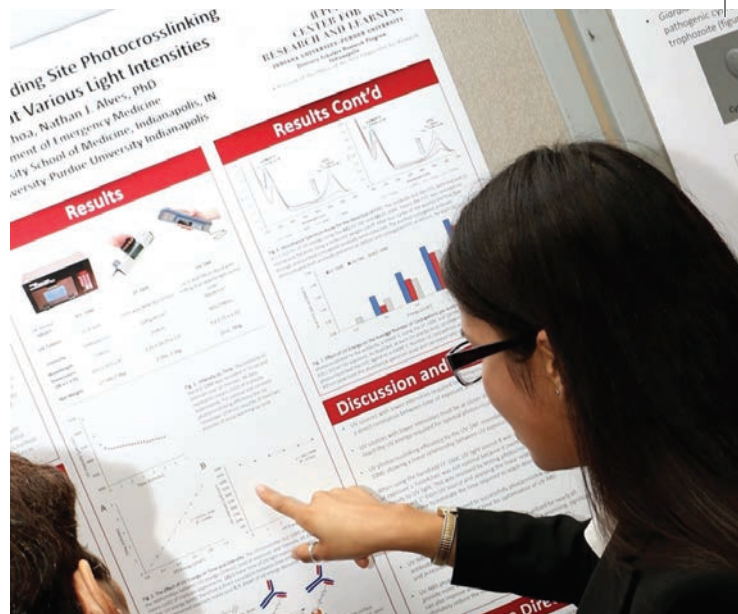
Undergraduate Research Poster Locations

The research showcase posters will be displayed in Room 119 from 3:00 to 4:30 p.m. We encourage the audience to meet the presenters and learn more about their exciting summer research.

The undergraduate research showcases were conducted at IN LSAMP campuses and were supported by the National Science Foundation under Grant No. HRD 1618408, 2016-2022. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

The members of the IN LSAMP program are thankful for the continued support of the National Science Foundation and for the opportunities it provides to our students.

PRESENTER (Last, First) Campus	POSTER NUMBER	AREA	POSTER TITLE
Adams, Kierra <i>Ball State University</i>	12	Biology	Genetic Engineering to Produce DCAs Using <i>Candida Viswanathii</i> through CRISPR Modification
Adebowale, Lyunade <i>IUPUI</i>	25	Chemistry	LC-MS/MS Detects Urobilinoids from Feces in Fly Guts
Aidoo, Opeibea <i>IUPUI</i>	43	Biology	Differential Regulation of Dyrk1a at the Perinatal Stage in Down Syndrome Mice
Appel, Monica <i>Ball State University</i>	10	Computer Science	Sphero in the Classroom
Baird, Joseph <i>West Virginia State University</i>	11	Biology	Genome Wide Association (GWA) Studies on Triglyceride Levels Due to the Diet Supplemented with Chili Peppers on <i>Drosophila melanogaster</i>
Barrios, Charles <i>Ball State University</i>	7	Chemistry	Synthesis of New Thermosensitive Copolymers for the Modification of Polysaccharides
Belcher, Samantha <i>West Virginia State University</i>	13	Biology	Genome Wide Association Studies on Feeding Effects of <i>Nigella sativa</i> on <i>Drosophila melanogaster</i>
Carey, William <i>IU Northwest</i>	14	Chemistry	Examining Excessive Ca ²⁺ /Mg ²⁺ in NW Indiana Rainwater
Coe, Kalee <i>IUPUI</i>	6	Biotechnology	Repeated Mild Traumatic Brain Injury Causes Chronic Glial Activation in the Cortex of Adult Male Mice
Dantzler, Maurice <i>Ball State University</i>	15	Biology	Herpetological Surveys of Red Tail Land Conservancy Properties
Diggs, Amber <i>Ball State University</i>	16	Biology	Overexpression and Purification of T7-RNA Polymerase for RNA In Vitro Synthesis
Elmalh, Eva <i>IU Northwest</i>	17	Biology	Prevalence of Colistin-resistant Bacteria in Sanitary Sewage and the Environment
Ethfagha, Cheikh <i>IUPUI</i>	18	Biology	Engineering an Acetolactate Synthase Variant Exhibiting Acetohydroxyacid Synthase Activity
Fagnon, Mahussi <i>IUPUI</i>	19	Biology	Comparing Thromboelastography (TEG) and Turbidity Measurements to Monitor Clot Formation of Native and FITC-tagged Fibrinogen



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Garcia, Cesar <i>IU Northwest</i>	1	Geology	Microplastics in Beach Sediment along Indiana Shores of Lake Michigan.
Gorski, Giovanna <i>IU South Bend</i>	20	Computer Science	vCARE: Application of Geotagging to Improve Delivery of Public Health Services
Ihano, Winnie <i>IU South Bend</i>	21	Biochemistry	Characterization of Adenosine Deaminase (ADA) Mutants in Severe Combined Immunodeficiency (SCID)
Jackson, Alero <i>IU Northwest</i>	22	Biology	Quantification of Antibiotic Resistance in Enteric Bacteria Isolated from Untreated Sewage
Jean-Baptiste, Stacey <i>IU South Bend</i>	23	Biological Sciences	Electrocatalytic Oxidation of Amino thiols Using Modified Electrodes with Gold Nanoparticles
Johnson, Crystal <i>IUPUI</i>	24	Biotechnology	Spinophilin Protein-protein Interactions in the Striatum Subsequent to Psychostimulant Administration
Jones, Jessica <i>IU South Bend</i>	2	Biological Sciences	Effects of Arbuscular Mycorrhizal Fungi on Plant Growth and Survival
Jones, Keon <i>IU South Bend</i>	8	Biological Sciences	The Effect of EF-P Post-translational Modifications on Cell Physiology in <i>E. coli</i>
Laws, Kaylin <i>Ball State University</i>	26	Biology	Investigation of Reducing Highly Cross-linked Inverse Vulcanized Sulfur Polymers
Lloyd, Adam <i>Ball State</i>	27	Biology	Synthesis of Substituted Pyrazolines as Inhibitors of Bacterial Invasion
Makanjuola, Emmanuel <i>IUPUI</i>	28	Chemistry	Quantifying ACCH Domain Stability via Differential Scanning Fluorimetry
Marks-Burns, Jazmin <i>Ball State University</i>	29	Biology	Investigating the Effects of PUS5 Deletion on Mitochondrial Encoded Protein Expression in <i>Candida albicans</i> and <i>Saccharomyces cerevisiae</i>
McGee, Conor <i>IU South Bend</i>	30	Chemistry	Calculating Lower and Upper Bounds to the Overlap Integral
Mena, Rebeca <i>Ball State University</i>	31	Chemistry	Microplate-based Colorimetric Detection of Free Hydrogen Sulfide Produced by mitoNEET and Cysteine

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Mitchell, David <i>IU South Bend</i>	32	Biology	Pollinator Diversity and Abundance in Neighboring Urban Wetlands
Molina, Deanna <i>IU Bloomington</i>	3	Neuroscience	The Impact of Video Game Mechanics on Memory and Learning
Montalvo-Hernandez, Carlos <i>IUPUI</i>	33	Engineering	All-in-one Pothole Machine
Moreno, Christian <i>IU South Bend</i>	34	Chemistry	Development of Tool to Operate on Periodic Trends
N'Guetta, Pierre-Emmanuel <i>IU South Bend</i>	35	Biology	Engineering a FABulous Fluorescent Glyphosate Biosensor Using Phosphate-binding Protein (PhnD)
Nkurunziza, Lionnel <i>IUPUI</i>	36	Neuroscience	The Attentional Set Shifting Task as a Measure of Cognitive Flexibility in Wistar Rats and Alcohol-preferring P Rats
Nnatubeugo, Chimere <i>Ball State University</i>	4	Biochemistry	Allosteric Regulation of Glutamate Dehydrogenase 1 by MitoNEET
Ochoa Medina, Celia <i>IUPUI</i>	37	Biomedical Engineering	UV Nucleotide Binding Site Photocrosslinking of Antibodies at Various Light Intensities
Olchawa, Nicholas <i>IU Northwest</i>	38	Biology	Me31B Role in mRNA Regulation
Roberts, TyLynn <i>IUPUI</i>	5	Biology	Determining Accurate Dyrk1a Levels in Developing Down Syndrome Mouse Brain
Rodriguez, Jose <i>Ball State University</i>	39	Chemistry	Investigation of the Impact of Cyano Substituents on the Reactivity of Oxypyridinium Salts
Rodriguez, Salvador Valle <i>Ivy Tech Community College</i>	9	Engineering	Electrodeposition of Germanium Telluride
Sanchez, Pedro <i>IUPUI</i>	40	Biology	Initial Studies for a Structure—Functional Analysis of <i>Phanerochaete chrysosporium</i> Desaturase
Valdez, Sinai <i>IUPUI</i>	44	Biology	Short-term Pharmacologic Inhibition of RAGE Suppresses Bone Turnover and Muscle Atrophy in Aging
Walker, Princess <i>Ball State University</i>	41	Biochemistry	Modification of Poly(s-dvb) Using Maleimide
Williams, Brooklyn <i>IUPUI</i>	42	Biology	The Role of Actin Binding Protein in Cellular Protrusions

