

HONOR SEMINARS

of
Metropolitan
Dayton

**2005 - 2006
Forty Fourth
Annual Report**

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Of
Metropolitan Dayton, Inc.***

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Honor Seminars of Metropolitan Dayton, Inc.
140 East Monument Avenue

Dayton, OH 45402

FOREWORD

The Honor Seminars of Metropolitan Dayton was organized in 1962 as a non-profit corporation having as its goal the function of providing for outstanding area high school students the opportunity to learn from and interact with highly qualified professional people from the greater Dayton area. To accomplish this goal, two separate seminar programs are established each year for selected juniors and seniors as an extracurricular activity. Effective use of the community resources is thereby utilized to develop the student who has demonstrated the desire and ability for high achievement. These seminars have been directed toward the understanding and appreciation of advances in modern sciences, technologies, and the humanities. They are meant to provide enrichment to the students' background, to aid in the development of independent thinking and the stimulation of individual creativity, and to lend assistance in defining personal career objectives. This annual report represents completion of 44 years of service to the community.

In 1973, the Honor Seminars of Metropolitan Dayton, Inc. joined the Affiliate Societies Council of the Engineering and Science Foundation of Dayton to provide Honor Seminars with a permanent headquarters address.

Seminar programs in recent years have been directed toward increased participation of the students and have emphasized discussions of the topics with seminar leaders. This mode of operation has helped to make the contents of the seminars meaningful to the students and to satisfy their intellectual curiosities. Many of the seminars are conducted within the working environments of the individual seminar leaders, permitting them to use a variety of demonstration materials pertinent to their profession and permitting the students to acquire deeper insights into the functions performed by these professionals in today's society. Honor Seminars is an educational program established in the spirit of voluntary participation. All operations of the program are conducted without compensation or honoraria for the service of the individuals. The continued success of the Honor Seminars program is the direct result of the strength of the seminar leaders who constitute the faculty and the foresight of the

officers and members of the Board of Directors. These professional individuals give gladly of their time and efforts to bring their knowledge and experience in a wide variety of fields. Their individual contributions are pointed out in this annual report of the activities for 2005-2006. Students of exceptional ability and promise are selected on an impartial basis from the public and private schools of the greater Dayton metropolitan area. The Principals and Counselors of these schools prior to the student's junior year provide nominations of candidates. An experienced Admissions Committee determines the selection of students from those nominated by the participating schools. Those students who displayed and maintained through their weekly attendance the very highest level of interest, initiative, talent, and scholarly activity are listed in this report of activities.

This year, as in the past, the program for the junior students was directed toward the basic sciences and mathematics in preparation for the senior program. Building on the junior year base, the senior program involves more applications technology and provides the senior students with opportunities to gain insight into work being performed at the leading edge of scientific endeavor.

The Honor Seminars of Metropolitan Dayton, Inc., serves a unique and fundamental need for the Montgomery-Greene County community. The cooperation and backing of the companies and institutions with which the seminar leaders and board members are affiliated have been substantial. The generous financial support provided by the many participating organizations in this community is appreciated and indicative of their desire to maintain this exceptional opportunity for our outstanding high school students. The Dayton Area Chamber of Commerce recognizes The Honor Seminars of Metropolitan Dayton, Inc., as an ongoing benefit to the community which merits contributory support from sponsoring organizations.

Senior Participants 2005 – 2006

Brookville High School

Bryan J. Connolly 6440 Wellbaum Rd.
Brookville 45309

Matthew D. Hoffman 10488 Upper Lewisburg-Salem Rd.
Brookville 45309

Sean A. Thomas 10913 Providence Rd.
Brookville 45309

Steven R. Wampler 9151 Upper Lewisburg-Salem Rd.
Brookville 45309

Carroll High School

Diane M. Buchwalder 1781 Sunnymead Rd.
Xenia 45385

Centerville High School

Erica L. Tan 320 Alston Woods Ct.
Centerville 45459

Kettering-Fairmont High School

Heather L. York 1951 Craig Dr.
Kettering 45420

Vandalia Butler High School

Phillip M. Grice 10400 Cassell Rd.
Vandalia 45377

Xenia High School

Jacob Z. Shapiro 39 Sexton Dr
Xenia 45385

Julie N. Merriman 1753 Ireland Rd.
Xenia 45385

Yellow Springs High School

Tina H. Chen 4680 Snypp Rd.
Yellow Springs 45387

Seminars of the Senior Participants

Dr. Matt Kabrisky (Emeritus) Air Force Inst of Technology	<i>Biomedical Engineering-Part I</i>
Dr. Matt Kabrisky (Emeritus) Air Force Inst of Technology	<i>Biomedical Engineering-Part II</i>
Dr. Doug Dudis Air Force Research Lab	<i>Fuel Cells</i>
Dr. Terry McKee WSU Math & Statistics Dept	<i>Polyhedral Graphs: From Soccer Balls to Buckyballs</i>
Dr. John Flach WSU Psychology Dept	<i>Human-Machine Systems</i>
Ms. Cheri Adams Boonshoft Museum of Discovery	<i>The Explorers of Mauna Kea</i>
Dr. John Fortman WSU Chemistry Dept	<i>Chemistry of Flight</i>
Dr. Madhavi Kadakia WSU Center for Genomics Research	<i>DNA Micro Array Technology</i>
Dr. Tamara Chelette Air Force Research Lab	<i>Agile Flight Simulation</i>
Dr. John Ferguson Air Force Research Lab	<i>Conducting Polymers</i>
Dr. Travis Doom WSU Biology Dept	<i>Bioinformatics</i>
Dr. Terry Wilson Air Force Research Lab	<i>Unmanned Air Vehicles</i>
Dr. Lew Yan Voon WSU Physics Dept	<i>Nanotechnology</i>
Mr. Raymond Wasky Northrop-Grumman Corp.	<i>Space Weather and it's Effects on Technology and the Environment</i>
Dr. Iam Demented Case Western University	<i>The Human Brain</i>
Dr. William Wiesel Air Force Inst of Technology	<i>Energy Prospects for the Long Haul</i>
Dr. Pamela Tsang WSU Psychology Dept	<i>Pilots and Aging</i>

Junior Participants 2005 – 2006

Alter High School

Christopher B . Douville

3741 Westwind Dr
Dayton, OH 45440

Alyssa M. Meyer

45 Trumpet Dr.
West Carrolton, OH 45449

Beavercreek High School

Deepika L. Chona

3848 Oakview Dr.
Beavercreek, OH 45434

Shyma S. Ramalingam

721 Farmbrok Dr.
Beavercreek, OH 45434

Jake A. Connors

1199 Whitetail Dr.
Fairborn, OH 45324

Nathan C. Moses

1125 Redcoat Ct.
Beavercreek, OH 45434

Laura A. Chachula

2261 Hunters Ridge Blvd.
Beavercreek, OH 45434

Joy V. Von Holle

2390 Clubside Dr.
Beavercreek, OH 45434

Brookville

Bryan J. Martin

10209 Westbrook Rd
Brookville OH 45309

Anthony S. Ewers

421 S. Wolfcreek Pike
Brookville OH 45309

Zachary A. Lammers

154 Timberwolf Way
Brookville OH 45309

Bellbrook High School

Christina M. Elias

3797 Fernwood Ct.
Dayton, OH 45440

Carroll High School

Alexander M. Newkold

2171 Hunters Ridge
Beavercreek, OH 45434

Kevin A. Pitstick

1792 Union Rd
Xenia, OH 45385

Spring Valley Academy

Sarah A. Diaz-Vazquez

496 Carter's Grove Rd.
Centerville, OH 45459

Centerville High School

Andrew R. Gruenzel

6777 Winding Cove
Centerville, OH 45459

Zachary S. Heck

1935 Rustling Oak Ct.
Centerville, OH 45459

Chaminade-Julienne

Meghan M. Phillips

3518 High Point Court
Beavercreek, OH 45440

Fairborn High School

Alyssa V. Bates

538 Daytonia Ave.
Fairborn, OH 45324

Meadowdale High School

Rachel M. Matthews

257 Burgess Ave.
Dayton, OH 45415

Aaron M. Stokes

2650 N. Gettysburg Ave.
Dayton, OH 45406

Miamisburg High School

James J. Fontaine

9714 Pellston Way
Miamisburg, OH 45342

Katie N. Litmer

1049 Decker Rd.
Miamisburg, OH 45342

Miami Valley School

Megan E. Caughey

361 Rue Marsaille
Dayton, OH 45429

Ravi K. Grandhi

10275 Cherry Tree Terrace
Dayton, OH 45458

Eric J. Reed

525 Ridgewood Ave.
Dayton, OH 45409

Sarah M. Jacobs

616 Murrell Dr.
Dayton, OH 45429

Northmont High School

Jacob C. Heinrichs

4874 Phillipsburg Rd., P.O. Box 132
Clayton, OH 45315

Oakwood High School

Colleen P. Judge

108 Lonsdale Ave.
Dayton, OH 45419

Genevieve E. Malone

330 Wiltshire Blvd
Dayton, OH 45419

Valley View High School

Mitchell T. Westwood

1954 Bull Rd
Farmersville, OH 45325

Vandalia Butler High School

Krishna N. Patel

451 Timberwind Lane
Vandalia, OH 45377

Jonathan J. Blaza

7045 Meeker Commons Lane
Dayton, OH 45414

West Carrollton

Dylan J. Petonke

2601 Rhapsody Dayton, OH 45449

Seminars of the Junior Participants

Dr. Stephen Barnes Sinclair, Romance Languages	<i>Language and Culture</i>
Dr. Stuart McDowell WSU, Theatre	<i>The Production of Theatre</i>
Prof. Matt Kabrisky, Emeritus AFIT, Electrical Engineering	<i>Bioengineering I: The Machine</i>
Prof. Matt Kabrisky, Emeritus AFIT, Electrical Engineering	<i>Bioengineering II: The Control System</i>
Dr. James Walker, Emeritus WSU, Political Science	<i>The Supreme Court</i>
Dr. John Raquet AFIT, Electrical Engineering	<i>Global Positioning Satellites</i>
Dr. Rubin Battino, Emeritus WSU, Chemistry	<i>A Fun Approach to Thermodynamics</i>
Judge Stephen Wolaver Greene County Common Pleas Court	<i>Criminal Justice System</i>
Dr. Basil Yanes Medical Oncology/Hematology Ass.	<i>Cancer Research</i>
Dr. Marina Ruggles-Wren AFIT, Aeronautics and Astronautics	<i>Advanced Materials in Transportation</i>
Mr. Stephen Hodson Procter & Gamble	<i>Plants and Medicines</i>
Dr. Linda Caron WSU, Art History	<i>Michelangelo's Sistine Chapel Ceiling</i>
Dr. Douglas Lehrer Wallace-Kettering Neuroscience Inst.	<i>Solving the Mysteries of Schizophrenia</i>
Prof. Riad Alakkad UD, Civil Engineering	<i>Civil Engineering Structures</i>
Dr. Charles Bleckmann AFIT, Environmental & Engineering Management	<i>Environmental Remediation</i>
Dr. Bradley Liebst AFIT, Aeronautics and Astronautics	<i>History of Flight and Aerospace Engineering</i>

Dr. Maurice Docton
IAMS

Dr. Ramana Grandhi
WSU, Mechanical Engineering

Dr. Leno Pedrotti
UD, Physics

Dr. Charles Larkowski
WSU, Music

Dr. Kelly Kissock
UD, Mechanical Engineering

Dr. Michele Wheatly
WSU, Dean, Science and
Mathematics

Dr. William Wiesel
AFIT, Aeronautics and Astronautics

Nutrition

***Modeling and Simulation of
Engineering Systems***

Optics and Vision

What does a musicologist DO?

Energy Sustainability

***Use of non-mammalian model
organisms to advance the
biomedical research agenda***

Space Travel

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Committee Chairmen

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CONTRIBUTORS

Companies and individuals throughout the Greater Dayton Area provide generous support to the Honor Seminars of Metropolitan Dayton, Incorporated. Several of the donors wish to remain anonymous. Following is a list of those donors, which have given their permission to be listed in this report.

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Laura and Joe Von Holle



The ancient Greek art in our corporate logo is known as the "Lamp of Knowledge" which is symbolic of the major goal of Honor Seminars. It represents the academic achievement and dedication of self-improvement through life long learning. Thus, it is appropriate to encompass this art within our corporate logo.

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