DIVISION OF CRITICAL CARE MEDICINE

DIVISION PROFILE

<table>
<thead>
<tr>
<th>Division of Critical Care Medicine</th>
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<tbody>
<tr>
<td>Number of Faculty</td>
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<tr>
<td>Number of Fellows</td>
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<tr>
<td>Clinical Fellows</td>
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<tr>
<td>Number of Graduate Students</td>
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<tr>
<td>Number of Support Personnel</td>
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<tr>
<td>Annual Total Grant Support (direct)</td>
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<td>Annual Total Industry Contracts (direct)</td>
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<td>Number of Peer Reviewed Publications</td>
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<tr>
<td>Patient Encounters</td>
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<tr>
<td>Inpatient</td>
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FACULTY LISTING

Hector Wong, MD, Professor of Pediatrics, Division Director
Eman Al-Khadra, MD, MPH, Research Instructor of Pediatrics
George Benzing, III, MD, Emeritus Professor of Pediatrics
Richard Brilli, MD, Professor of Clinical Pediatrics, Associate Chief of Staff; Clinical Director, Pediatric Intensive Care Unit; Medical Director, Patient Transportation Services
Lesley Doughty, MD, Associate Professor of Clinical Pediatrics
Paul Gardner, PhD, Research Assistant Professor of Pediatrics
Brian Jacobs, MD, Professor of Clinical Pediatrics, Director, Technology and Patient Safety
Jennifer Kaplan, MD, Research Instructor of Pediatrics
Neil Kooy, MD, Associate Professor of Clinical Pediatrics, Fellowship Director
Kristen Page, PhD, Research Assistant Professor of Pediatrics
Sue Poynter, MD, Research Instructor of Pediatrics
Derek Wheeler, MD, Assistant Professor of Clinical Pediatrics, Associate Medical Director, Pediatric Intensive Care Unit
Basilia Zingarelli, MD, PhD, Research Associate Professor of Pediatrics

OVERVIEW

The Division of Critical Care Medicine provides comprehensive and state of the art clinical care for all critically ill children admitted to Cincinnati Children’s Hospital Medical Center (CCHMC). In-house coverage and consultation is available 24 hours per day. The Pediatric Intensive Care Unit (PICU) consists of 25 intensive/intermediate care beds, all of which are located on the 6th floor of the hospital tower. In addition, the Division of Critical Care Medicine administers all transports to and from CCHMC. Staff from the Division of Critical Care Medicine also provides medical coverage for the Cardiac Intensive Care Unit at CCHMC.

All medical patients admitted to the PICU are primarily managed by members of the Division of Critical Care Medicine. We actively seek consultation and co-management strategies with other medical subspecialty groups at CCHMC and community physicians. Surgical patients admitted to the PICU are co-managed by members of the Division of Critical Care Medicine and the respective surgical services. We serve a diverse group of patients and are capable of expertly providing advanced support for all forms of organ system failure including respiratory, cardiovascular, neurologic, hepatic, renal, and hematologic failure.

The Division of Critical Care Medicine has active and productive research programs in both basic science and clinical science. All clinical faculty members have active research efforts in either basic science research or clinical research. In addition, there
are 2 PhD-level, full-time research faculty within the Division, and 14 research support personnel. Our basic research approaches range from molecular biology to large animal physiology to drug development. Specific basic research programs and interests include lung inflammation, immune modulation, ischemia-reperfusion, pulmonary hypertension, heat shock protein biology. Specific clinical research programs and interests include vascular thrombosis, status asthmaticus, respiratory failure, pulmonary hypertension, septic shock, nutrition, and genomics. Research activities are widely supported through various granting agencies and industry contracts.

The Division of Critical Care Medicine has an ACGME-accredited training program in Pediatric Critical Care Medicine. This 3 to 4 year program provides subspecialty training for pediatricians seeking certification in Pediatric Critical Care Medicine. The program includes extensive clinical and research training. A portion of the research training is funded through a NIH training grant. Ten fellows are currently in the program, while 19 other fellows have graduated and are currently practicing in major PICUs throughout the country and abroad.

**HIGHLIGHTS**

The last fiscal year was highlighted, again, by a record number of admissions to the pediatric intensive care unit.

Ranjit Chima MD, Research Instructor, joined the faculty in July 2007. Dr. Chima is a graduate of the CCHMC training program in pediatric critical care medicine.

Lesley Doughty, MD, Associate Professor, was appointed as the Fellowship Director.

Richard Brilli, MD, was appointed as the Co-Chair of a National Association of Children’s Hospitals and Related Institutions (NACHRI) committee focused on elimination of catheter associated blood stream infections in critically ill children.

Derek Wheeler, MD, was appointed as Associate Medical Director of the PICU.

Plans were initiated to expand PICU bed capacity to 35 beds within the next year.

Quality improvement efforts initiated by the Division (Dr. Brilli) have led to drastic reductions in the number of ventilator associated pneumonias in the ICU as well as cardiopulmonary arrests outside of the ICU.

**TRAINING**

<table>
<thead>
<tr>
<th>Name</th>
<th>PL</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Elizabeth Mack, MD</td>
<td>PL-4</td>
<td>Palmetto Richland University</td>
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<tr>
<td>Michael Bigham, MD</td>
<td>PL-5</td>
<td>Medical College of Ohio</td>
</tr>
<tr>
<td>Scottie Day, MD</td>
<td>PL-5</td>
<td>Indiana University</td>
</tr>
<tr>
<td>Elizabeth Galloway, MD</td>
<td>PL-5</td>
<td>University of South Dakota</td>
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<tr>
<td>John Giuliano, MD</td>
<td>PL-5</td>
<td>George Washington School of Medicine and Health Sciences</td>
</tr>
<tr>
<td>Jeffrey Nowak, MD</td>
<td>PL-5</td>
<td>University of Minnesota</td>
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<tr>
<td>Ranjit Chima, MD</td>
<td>PL-6</td>
<td>Children’s Hospital Detroit</td>
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<tr>
<td>Erika Stalets, MD</td>
<td>PL-6</td>
<td>University of Tennessee Health Sciences Center</td>
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<tr>
<td>Margaret Chase, MD</td>
<td>PL-7</td>
<td>Ohio State University</td>
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**GRANTS, CONTRACTS AND INDUSTRY AGREEMENTS**

<table>
<thead>
<tr>
<th>Grant and Contract Awards</th>
<th>Annual Direct/Project Period Direct</th>
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<tbody>
<tr>
<td>Al-Khadra, E</td>
<td></td>
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<tr>
<td><strong>Role of DVL in CA–Tirsa Virulence</strong></td>
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<tr>
<td>American Academy of Pediatrics</td>
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<tr>
<td>09/01/06 – 08/31/07</td>
<td>$10,000</td>
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Chima, R
Host Response to Trauma Research Training Program
National Institutes of Health (University of Cincinnati subcontract)
T32 GM 008478 03/01/05 – 06/30/09 $111,200/$488,968

Doughty, L
Viral Modulation of the Inflammatory Response
National Institutes of Health
K08 GM 071568 03/01/05 – 06/30/09 $111,200/$488,968

Kaplan, J
Molecular Epidemiology in Children’s Environmental Health
National Institutes of Health (University of Cincinnati subcontract)
T32 ES 010957 07/01/05 – 06/30/07 $51,036/$102,672

Page, K
Role of Cockroach Proteases in Airway Inflammation
National Institutes of Health
R01 HL 075568 12/15/04 – 11/30/08 $189,636/$800,000

Wheeler, D
The Immunomodulatory Effects of HSP 70
National Institutes of Health
K08 GM 077432 04/01/06 – 03/31/11 $112,250/$561,250

Wong, H
Pediatric Off-Patent Drugs Study/Center for Lorazepam Sedation
National Institute of Health (Case Western Reserve University subcontract)
N01 HD 003367 04/01/05 – 03/31/08 $101,849/$316,512

Pediatric Off-Patent Drugs Study/Center for Lorazepam Sedation
National Institute of Health (Case Western Reserve University subcontract – per patient)
N01 HD 003367 04/01/05 – 03/31/08 $97,800/$293,400

Zingarelli, B
Role of PPAR and Agonists in Septic Shock
National Institutes of Health
R01 GM 067202 07/01/03 – 06/30/07 $214,830/$880,000

Role of Eicosanoids in Shock
National Institutes of Health (Medical University of South Carolina subcontract)
R01 GM 027673 07/01/04 – 06/30/09 $10,798/$63,569

Current Year Direct $1,010,599

Industry Contracts
Wheeler, D
Children’s Healthcare of Atlanta $770

Current Year Direct Receipts $770

TOTAL $1,011,369

PUBLICATIONS


