

CONTACT INFORMATION

VP for Research

Interim Director of IDEA

Dr. Louis H. Aulick

Suite 1300,

401 11th Street

Huntington, WV 25701

304-696-4748

fax 304-697-3662

aulick@marshall.edu

Marshall University

Biotechnology

<http://www.marshall.edu/biotechnology/>

MARSHALL UNIVERSITY biotechnology

www.marshall.edu/biotechnology/

BIOTECHNOLOGY RESEARCH

Marshall University, located in Huntington and Charleston, West Virginia, is the second largest institution in the state with an enrollment of 16,500 undergraduate and graduate students. Research funding has tripled over the last ten years. In 2003/2004, total grants and contracts reached almost \$60 million. Approximately 75% of this funding comes from federal agencies with the NIH being the primary funding agency. The principal contributors to the biotechnology emphasis are clinical and basic investigators from the Joan C. Edwards School of Medicine and the College of Science.

To promote continued growth in innovation and commercialization, the university is using over \$120 million in federal, state and private funds to construct the following clinical and basic research facilities.

- Edwards Comprehensive Cancer Center
- Robert C. Byrd Biotechnology Science Center
- Biotechnology Development Center
- Forensic Science Center Addition
- Clinical Education and Outreach Center

Complementing university biotechnology development is the creation of a \$17 million high tech park less than one

mile from the university's new cancer center.

University biotechnology foci include **medical, environmental** and **forensics**.

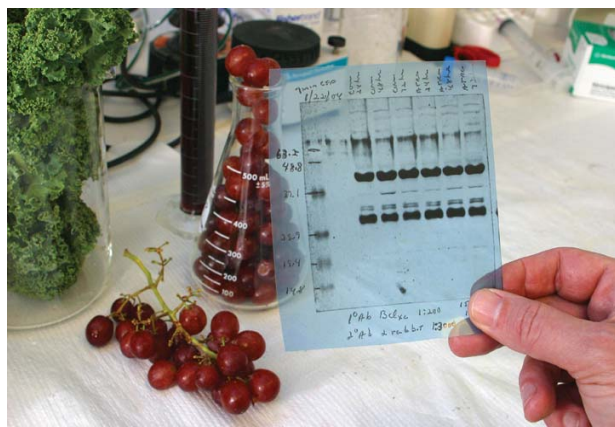
Featured elements include:

1. a strong medical school with a nationally recognized rural health emphasis,
2. nationally accredited forensic science laboratory and graduate program,
3. extensive cadre of environmental scientists and engineers focused on water quality research,
4. rapidly developing tech transfer and business development capacity through IDEA, and
5. Strong business development support from Huntington Area Development Council and Biotech Alliance.

Marshall University has all the essential elements for regional biotechnology development.



Robert C. Byrd Biotechnology Science Center



Marshall University Biotechnology Investigators

Bacterial indicators of water quality & biodegradation/bioremediation

Dr. Charles Somerville
304-696-2424
somervil@marshall.edu
<http://webpages.marshall.edu/~somervil/>
<http://www.marshall.edu/biotechnology/present/USACE.htm>

Genotypic bacterial source tracking fecal pollution in natural waterways

Dr. Pamela Staton
304-690-4363 ext. 201
staton1@marshall.edu
<http://www.marshall.edu/biotechnology/present/pstaton.htm>

Aquatic biomonitoring from communities to genetics

Dr. Tom Jones
304-696-7243
jonest@marshall.edu

Evolution and genetics of toxic arthropods

Dr. Victor Fet
304-696-3116
fet@marshall.edu
<http://www.science.marshall.edu/fet/euscorpius/fet.htm>

Epithelial cell polarity

Dr. Simon Collier
304-696-6111
simon.collier@marshall.edu

Chromatin structure of eukaryotic promoters

Dr. Philippe Georgel
304-696-3965
georgel@marshall.edu
<http://www.science.marshall.edu/georgel/>

Molecular basis of mammalian fertilization

Dr. Guo-Zhang Zhu
304-696-2429
zhu4@marshall.edu

Genetic basis of hypercholesterolemia

Dr. Donald Primerano
304-696-7338
primeran@marshall.edu

Control of posture and walking in animals/legged robots

Dr. Sasha Zill
304-696-7384
zill@marshall.edu
<http://medix.marshall.edu/~zill/Projects.htm>

Obesity-associated hypertension

Dr. Elsa I. Mangiarua
304-696-6211
mangiaru@marshall.edu

Obesity-associated hypertension

Dr. William D. McCumbee
304-696-7366
mccumbee@marshall.edu

SNPs and cardiovascular disease

Dr. Elizabeth Murray
304-696-2366
murraye@marshall.edu
<http://www.marshall.edu/senate/achieve/profile.asp?ID=237>

Molecular mechanisms of smooth muscle contraction and hypertension

Dr. Gary Wright
304-696-7368
wrightg@marshall.edu

Mechanisms of mechanical signal transduction in skeletal and smooth muscle

Dr. Eric C. Blough
304-696-2708
blough@marshall.edu
<http://www.science.marshall.edu/blough/>

Non-mast cell histamine in blood vessels

Dr. Carl Gruetter
304-696-7321
gruetter@marshall.edu

Vitamin A (retinoids), protein kinase C, resveratrol, melanocytes, and melanoma

Dr. Richard M. Niles
304-696-7323
niles@marshall.edu
<http://musom.marshall.edu/bio/niles.htm>

The role of β -catenin in pituitary tumor growth and melanoma

Dr. Beverly C. Delidow
304-696-7266
delidow@marshall.edu
<http://musom.marshall.edu/bio/delidow.htm>

Progestins and breast cancer

Dr. Michael Moore
304-696-7324
moorem@marshall.edu
<http://musom.marshall.edu/bio/moore.htm>

Transcription factors in cancer

Dr. Maiyon Park
304-696-7033
parkm@marshall.edu

SKI and SNO expression in male germ cells and testicular tumors

Dr. Laura L. Richardson
304-696-3681
richardson@marshall.edu

Epigenetics and cancer

Dr. Vincent E. Sollars
304-696-5457
sollars@marshall.edu
<http://musom.marshall.edu/microbiology/sollars/research-interest.htm>

Mitochondria and nitric oxide in oxidative stress and cell homeostasis

Dr. Pedram Ghafourifar
304-696-7391
ghafourifar@marshall.edu
<http://musom.marshall.edu/pharmacology/ghafourifar.htm>

Thimerosal induced neurotoxicity

Dr. Kelley Kiningham
304-696-7391
kiningham@marshall.edu

Mechanisms of nephrotoxicity & bioactivation of chemicals to toxic species

Dr. Gary O. Rankin
304-696-7313
rankin@marshall.edu

Hepatic and renal toxicity of drugs and pesticides

Dr. Monica Valentovic
304-696-7332
valentov@marshall.edu

Genetic basis of biofilm formation and bacterial lung infection in cystic fibrosis

Dr. Hongwei Yu
304-696-7356
yuh@marshall.edu

Neural basis for learning and memory

Dr. Lawrence M. Grover
304-696-7328
grover@marshall.edu

Production of anti-cancer alkaloids from plant cells in a microgravity bioreactor

Dr. Jagan Valluri
304-696-2409
valluri@marshall.edu
<http://www.science.marshall.edu/valluri>

Plant responses to environmental stress conditions

Dr. Marcia Harrison
304-696-4867
harrison@marshall.edu
<http://www.marshall.edu/cellcentral/>

Structure/functional relationships of calcium binding/signaling proteins

Dr. Jaroslava Miksovska
304-696-3371
miksovska@marshall.edu
<http://www.science.marshall.edu/miksovska/>

Micro and nano scale imaging studies

Dr. Michael Norton
304-696-6627
norton@marshall.edu
<http://www.atomcrafters.com/Index.htm>

Carbon nanotubes and nanoporous silicon based devices and sensors

Dr. Ashok K. Vaseashta
304-696-2755
vaseashta@marshall.edu
<http://webpages.marshall.edu/~vaseashta>
<http://www.marshall.edu/nato-asi>