Collaborative Research Opportunities

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Why AOA needed realignment...

- Osteopathic distinctiveness at risk
- Research not coordinated
- Not enough evidence-based research
- Lack of research funding is embarrassing
- Skeptical Students
<table>
<thead>
<tr>
<th>Who Are We?</th>
<th>How Do We Teach?</th>
<th>What Do We Do?</th>
<th>What Difference Do We Make?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenets:</td>
<td>Hands on</td>
<td>Listen to our Patients</td>
<td>Improve Patient Engagement/ Satisfaction/ Value/Care</td>
</tr>
<tr>
<td>• Mind, Body, Spirit Approach</td>
<td>Primary Care</td>
<td>Touch/OMT</td>
<td>• Better Outcomes</td>
</tr>
<tr>
<td>• Body’s ability to heal</td>
<td>Community Based</td>
<td>Empathy</td>
<td>• Improve Efficiency</td>
</tr>
<tr>
<td>• Structure/ Function</td>
<td>Practical</td>
<td>Teach</td>
<td>• Decrease Costs</td>
</tr>
<tr>
<td>• All above in treatment</td>
<td></td>
<td>Mentor</td>
<td>• Provide options</td>
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</table>

**Importance of Research to the Profession**

- Improve Patient Engagement/ Satisfaction/ Value/Care
- Better Outcomes
- Improve Efficiency
- Decrease Costs
- Provide options
- Establish three year Strategic Focus for AOA research enhancement initiative.

- Leverage collaborative opportunities with domestic and international osteopathic research initiatives.

- Expand internal research capacity on the profession, through collaboration and integration.
AOA’s Role

Five Research Focus Areas
- Chronic Diseases & Conditions
- Osteopathic Philosophy
- Musculoskeletal Injuries & Prevention
- Impact of OMM & OMT
- Pain Management

AOA’s Role (Convener of Research)

Other Collaborations

Grant Making (AOA Sponsored, Sponsored by Others, & Co-Funded)

Securing Grants (Connection to Opportunities & Lead on Grants)
Grants & Other Activities

• Research Grant Program
  • Applications available: November 1st
  • Deadline: January 31st
  • Awards: June 15th
• Three additional programs:
  • Osteopathic Medical Student Grant
  • Physician in Training Grant
  • New Investigator Grant (coming soon)

Chronic Diseases – RFA: Diabetes
Musculoskeletal Injuries & Prevention – RFA:
Application of OM to musculoskeletal injuries and prevention (e.g., concussion, neuropathies, fall prevention, headaches)

Osteopathic Philosophy –
RFA 1: Compassion/ Empathy/ Patient Satisfaction
RFA 2: Cost Effectiveness

OMM/OMT–
RFA 1: Inflammation
RFA 2: Parkinson’s disease

Pain Management–
RFA: Patient outcomes (e.g., Medication usage, functional measures, cost)
AOA as the Funder of Research

<table>
<thead>
<tr>
<th>Grant Categories</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
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</thead>
<tbody>
<tr>
<td>OMM/OMT</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Musculoskeletal Inj. &amp; Prev.</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Pain Management</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Chronic Disease</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Osteopathic Philosophy</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Student Grant</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Physicians in Training Grant</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total # of Grants</td>
<td>9</td>
<td>8</td>
<td>13</td>
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AOA Research Funding

<table>
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<tr>
<th>Year</th>
<th>Amount</th>
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<tr>
<td>Prior to FY16</td>
<td>$300,000</td>
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<tr>
<td>FY16</td>
<td>$1,040,182</td>
</tr>
<tr>
<td>FY17</td>
<td>$1,098,409</td>
</tr>
<tr>
<td>FY18</td>
<td>$1,390,961</td>
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AOA as a Co-Funder of Research

+ Received an additional $100,000 to Osteopathic Philosophy: Cost-Effectiveness Study on OMM/OMT from local partner

+ AOA contributed $75,000 to the empathy study with AACOM and additional $82,452 for FY19

+ Potential opportunity to partner with an osteopathic foundation for funding of a new grant category for new investigators
Seeking Sponsorships, Collaborations & Other Opportunities

**Parkinson’s**
- Michael J. Fox Foundation
- Parkinson’s Foundation

**Diabetes & Metabolic Syndrome**
- American Diabetes Association
- American Association of Diabetic Educators
- Industry Partners (e.g., Novo Nordisk)

**Chronic Pain Management**
- Organizations addressing opioid crisis
- Industry Partners (e.g., Purdue, Merck)

**MSK Injuries & Prevention**
- AAOS
- Arthritis Foundation
- NIAMS
- Movement is Life
2nd Research Stakeholder Forum

**What:** A review of AOA’s five research priority areas

**Who:** BOT, BOCER, BSAPH, Grantees, COMs, Corporate/ Industry, and non-osteopathic non-profits

**Where:** LEAD Conference (pre-conference session)

**When:** January 2019
Effects of OMT on Gait Kinematics and Postural Control in Parkinson Disease

KENDI HENSEL, DO, PhD
RITA PATTERSON, PhD
EVAN PAPA, PT, DPT, PhD
Study design

- 3 study groups
  - Sham OMT, AROM and PROM
  - Neck-down OMT protocol
  - Whole body OMT protocol (includes OCMM)

- Enrollment goal 45 participants with Parkinson Disease
- 45 age-matched healthy controls
- One-time visit lasting 3-4 hours
- Reimbursed for time and travel
Inclusion and Exclusion Criteria

**Inclusion:**
- For PD participants: Neurologist-diagnosed idiopathic PD, H&Y stages 1.0-3.0
- Ability to stand independently for 1 minute and ambulate 100 yards independently
- Healthy (not under ongoing medical care for health problems that could impact performance on study tasks)

**Exclusion:**
- Idiopathic PD in Hoehn & Yahr stages >3.0
- Previous surgical management of PD (pallidotomy, deep brain stimulation (DBS))
- Central or peripheral nervous system disorders other than PD including, but not limited to multiple sclerosis, cerebral palsy, Alzheimer’s diseases, or chronic fatigue syndrome
- Cognitive impairment as defined by the Mini-Mental Status Examination (<26 for subjects with PD and <24 for control subjects)
- Unable to stand independently for 1 minute and to walk independently for 100 yards
- Body weight >400lbs
- Dual belt instrumented treadmill
- Motion-capture of 54 markers through 12 cameras (Motion Analysis Corp, Santa Rosa, CA).
Clinical Measures:

- TUG
- Functional Reach
Fall Simulation

Perturbations,
Treadmill acceleration to simulate a fall

- During Standing
- During walking
Measures

- Marker position – joint angles
- Force and position of Center of Pressure of the feet
- Center of Pressure Center of Mass relationship
Striving to Positively Affect Lives – Physicians and Patients
Building the Pipeline

- **Student**
  - OMS Grant
  - Poster Presentations

- **Resident/Intern/Fellow**
  - Physician in Training Grant
  - Podium Presentations*

- **New Investigator**
  - Expert Panels
  - Reviewer*
  - Grants

- **Seasoned Clinician-Scientist**
  - Expert Panels
  - Reviewer
  - Grants

- **Research Readiness Program***
- Engage Initiative
- Bureaus & Taskforces
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<tr>
<th><strong>BOCER</strong></th>
<th><strong>BSAPPH</strong></th>
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<tr>
<td>• Oversees all AOA research and quality improvement activities.</td>
<td>• Renewed focus:</td>
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<td>• Five Taskforces created - one for each research focus area</td>
<td>• AOA public health policy</td>
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<tr>
<td>• Report directly to BOCER</td>
<td>• Identify key public health issues</td>
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<tr>
<td>• &gt; $1MM awarded per grant cycle</td>
<td>• Comment on national public health issues emphasizing the osteopathic perspective</td>
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<td></td>
<td>• Create quality learning opportunities and tools for DO’s to improve patient care</td>
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AOA’s has a designated page on its website to highlight its partnership with NIDA.

The site has links to:

- Resources
- AOA & NIDA CME on Adolescent Substance Use and Rx Medication Misuse
- CDC guidelines to prescribing opioids

Information will change quarterly