

Technology Transfer and Economic Development

900 Innovation Drive, Suite 145
Rolla, Missouri 65409-1110



ecodevo.mst.edu | businessdevelopment.mst.edu | techtransfer.mst.edu

Mr. Keith Strassner
Director, Technology Transfer and Economic
Development
Phone: 573-341-6725
Email: kdstrass@mst.edu

Mr. John Woodson
Senior Licensing Associate
Phone: 573-341-7544
Email: jwoodson@mst.edu

Ms. Deena Aaron
Administrative Assistant OTTED
Phone: 573-341-7584
Email: aarond@mst.edu

Ms. Casey Gideon-Saladin
Technology Transfer – Business Manager
Phone: 573-341-7263
Email: gideonc@mst.edu

Ms. Karen Leatherman
Business Development Specialist
Phone: 573-341-4551
Email: Leathermank@mst.edu

Mr. Travin Shelton
Business Development Specialist
Phone: 573-341-6272
Email: sheltontt@mst.edu

S&T's Center Focus/Expertise

- Technology Commercialization/Transfer
- Entrepreneurship – faculty/student
 - Lean Launch Pad/Business Model Canvas
 - Entrepreneurial Co-op and Internship Program
 - Technology Scoping and Venture Packaging
- Intellectual property
 - patents, copyrights, trade mark
- Financing – Debt, Equity
- Communications, Social Media & Marketing
- Contract Support - OSP

Results: Technology Transfer & Economic Development

2017

15 PATENTS ISSUED

31 PATENT APPLICATIONS FILED

44 AVERAGE ANNUAL DISCLOSURES

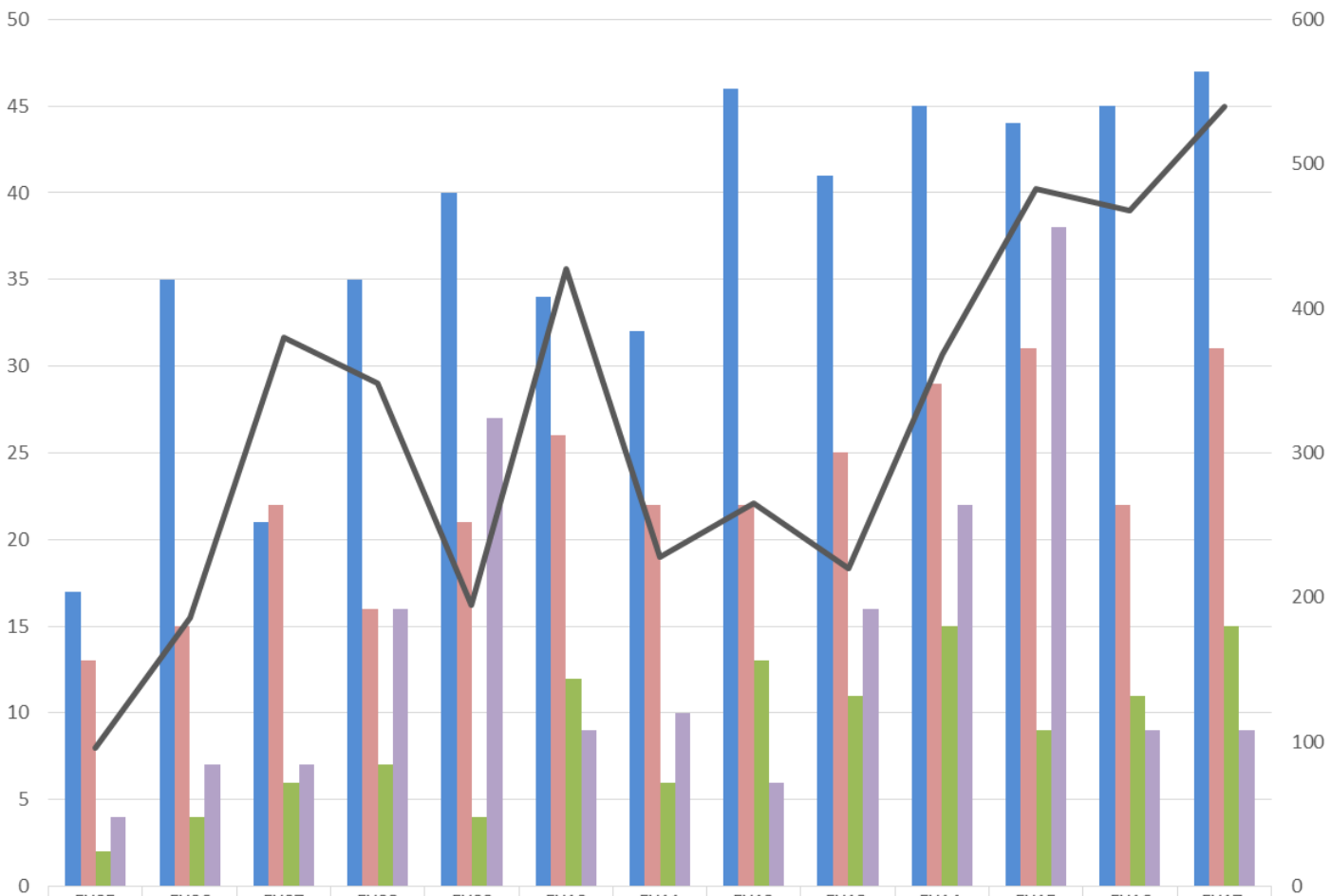
ROYALTY INCOME (000s)



LICENSES & OPTIONS SIGNED

2017	8
2016	9
2015	38
2014	22
2013	16

S&T TTO Metric 2005-2017



	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
■ Invention Disclosures	17	35	21	35	40	34	32	46	41	45	44	45	47
■ Patents Filed	13	15	22	16	21	26	22	22	25	29	31	22	31
■ Patents/Copyrights Issued	2	4	6	7	4	12	6	13	11	15	9	11	15
■ License/Options	4	7	7	16	27	9	10	6	16	22	38	9	9
— Royalty Income (\$K)	96	186	380	348	195	427	228	265	220	368	483	468	540

TTO Comparable Schools

2016 last year available from AUTM (Based on 3 year 2014-2016 average)						
Metric	S&T	S&T Rank	Colorado School of Mines	Michigan Tech	New Jersey Tech	Stevens (DNR 2016)
Invention disclosures (3 year ave)	45	3	48	37	42	51
Disclosure/million in research (3 year ave)	1.21	2	0.80	0.53	0.36	1.78
Gross license income (3 year ave)	\$439,667.00	1	\$106,106.00	\$251,814.00	\$101,548.00	\$262,333.00
License income/million research (3 year ave)	\$ 11,995.00	1	\$ 1,786.00	\$ 3,588.00	\$ 881.00	\$ 9,058.00

Borate based Bio-Glass



License Income
Received to date:
\$590,819

Global market for
wound care is \$4
Billion

FDA approved and
launched in April
2017



22 US and Foreign patent applications

15 issued patents (12 US, 3 foreign)
7 pending (1 US, 6 foreign)

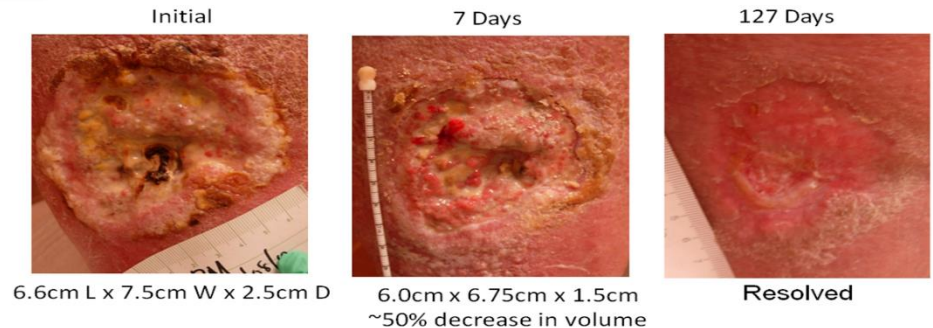
License to mo-sci for human use

License to RediHeal
for Veterinary use

mo-sci direct
market Mirragen™
Advanced Wound
Matrix

Sublicense to Ultradent
for dental care

Sublicense to Prosidyan
for bone repair



Innovation and Entrepreneurship

- New Emerging Innovations

- Underwater cellular communication
- Detonation synthesis of nanomaterials
- Detection of counterfeit computer chips
- Advance manufacturing, processes and software
- Catalytic Ink
- Solid State NMR Spectroscopy/Imaging In Situ Measuring Devices

- Faculty startups formed

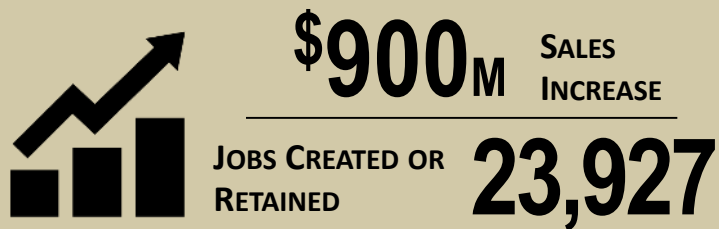
- Smart Health Beacons LLC – cognitive health assessment and monitoring
- Innocit LLC – power convertors for alternative energy sources
- Froberg Aerospace LLC – micro-sat propulsion
- Clear Signal Technologies – software for EMC

- Undergraduate Student Startup:

- Victory Pieces LLC, next day delivery service business for local companies to compete with big box stores, launched in St. Louis early 2017
- Engineered Terrain, autonomous commercial lawn mowing system

SBTDC Results

STATEWIDE SBTDC & PTAC 2014-2016



MISSOURI S&T SERVICE AREA 2016



2012-2016



NATIONWIDE 2015



Venture Lab - Business Incubator



Services Provided:

- Professional work space
- Use of building conference room
- Mentoring and business assistance
- Access to venture financing
- Rapid Prototyping, 3D printing





EICP Participants: Bhanu Baddipadiga, James Brizendine, George Holmes, Gannthum Hullikunte, John Schnoberle

Incubator Start Ups: Dual Cases, LLC, Huffle Health Intercept Research, Off Kilter Studios, O'Riginal Solutions, SoloBuy, VirtuSchools, Zimmerman Technology, Victory Pieces, ProtoQ,