

# Curriculum Vitae

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**Dániel Apai, Ph.D.**

Steward Observatory  
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**POSITIONS**

2024- Associate Dean for Research, College of Science, Univ. of Arizona  
2022-2024 Interim Associate Dean for Research, College of Science, Univ. of Arizona  
2021- Professor of Astronomy and Planetary Science, University of Arizona  
2017-2021 Associate Professor of Astronomy and Planetary Science, Univ. of Arizona  
2011-2017 Assistant Professor of Astronomy and Planetary Science, Univ. of Arizona  
2008-2011 Assistant Astronomer, Science Policies Group,  
Space Telescope Science Institute, Baltimore  
2004-2008 Postdoctoral Research Associate, Steward Observatory and NASA  
Astrobiology Institute, The University of Arizona

**EDUCATION**

2004 PhD, University of Heidelberg and Max Planck Institute for Astronomy  
Heidelberg, Germany, Advisor: Prof. Thomas Henning  
2000 MSc in Physics, University of Szeged, Hungary

**LEADERSHIP AND STRATEGIC SERVICE**

Interim Associate Dean for Research, College of Science, 2022 -  
Science Advisory Committee, Vatican Observatory, 2023  
Co-Lead, Nautilus Space Observatory, Technology and Science Development Team  
Founder and Lead, Atmospherica group, Atmospheric CO<sub>2</sub> removal and sequestration  
Co-Lead, NASA/NExSS (600+ member research coordination network), 2019-2022  
Co-Chair, NExSS Quantitative Habitability Science Working Group, 2020-2023  
Chair, HST-TESS Advisory Committee, Space Telescope Science Institute  
Member, Science Advisory Committee, Giant Magellan Telescope  
Executive Committee Member, NASA Exoplanet Program Analysis Group (EXOPAG)  
Chair, NASA EXOPAG Study Analysis Group (EXOPAG SAG15)  
*Science Questions and Data Requirement for Direct Imaging Missions*

**SPACE MISSION INVOLVEMENT**

Nautilus Space Observatory concept, PI  
MODE Technology Space Demonstrator Mission, PI  
NASA Pandora SmallSat: Exoplanets Science Working Group Lead, Co-I (2021-),  
and PI of Univ. Arizona Science and Mission Operations Team  
Hubble Space Telescope Science Mission Team (2008-2011)

**MAJOR PROJECTS AS PRINCIPAL INVESTIGATOR**

1. **Atmospherica**, a university-industry consortium to develop and implement a biotechnology-based, natural, scalable CO<sub>2</sub> removal and sequestration technology (lead inventor: Apai), with the goal to offset 1Gt-level annual CO<sub>2</sub> emission. Atmospherica is currently funded by UA Tech Launch as it transitions to commercialization.
2. **Alien Earths** (NASA/ICAR) Astrobiology Research Program, \$6.2M. A multidisciplinary team of 50 members, working toward answering the question “Which nearby planetary systems are more likely to harbor habitable planets?” <https://alienearts.space> Alien Earths has published over 100 refereed papers.
3. **Cloud Atlas** (Hubble Space Telescope Large Treasury Program, 112 orbits): A major Hubble program to understand how do atmospheric structure and cloud properties in exoplanets and brown dwarfs change with temperature and gravity.
4. **Extrasolar Storms** (Spitzer Exploration Science Program, 1,144 Spitzer hours + 28 HST orbits, Cycle-9): One of the largest Spitzer Space Telescope programs ever approved, Extrasolar Storms is monitoring the evolution of giant storms and jets in brown dwarfs over 1.5 years; the first program dedicated to atmospheric dynamics of brown dwarfs.
5. **Earths in Other Solar Systems** (EOS): A \$5.6M NASA award for the multi-disciplinary study of how Earth-like planets form and acquire their volatiles and organics EOS published 160 refereed papers. .
6. **Scorpion Survey**: 100-star direct imaging survey for long period giant exoplanets; the survey already resulted in a discovery of two planet-forming disks, widely covered in the media. The survey used the SPHERE adaptive optics system on the Very Large Telescope in the Atacama Desert in Chile.
7. **ACCESS Survey (2014-2022)**: As one of three Co-PIs Apai led ACCESS, the largest systematic transmission spectroscopic survey of exoplanets, utilizing the Magellan telescope.

**KEY RECENT GRANTS AS PI:****Pandora Space Telescope**

NASA SmallSat Program, \$20M total, Apai Co-I	\$1.1M	2024-2027
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**Alien Earths**

NASA Astrobiology	\$6.20M	2021-2026
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**Nautilus Space Observatory / MODE Technology**

Gordon and Betty Moore Foundation (Apai Co-PI)	\$1.50M	2018-2022
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**Earths in Other Solar Systems**

NASA Nexus for Exoplanet System Science	\$5.70M	2015-2020
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**Cloud Atlas**

Hubble Space Telescope Large Treasury Program (112 orbits)	\$0.86M	2016-2019
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**Extrasolar Storms**

Spitzer Exploration Science Program (1,144h + Hubble)                      \$0.75M                      2012-2016

**TELESCOPE TIME ALLOCATION AS PI OR CO-PI INCLUDE:**

2 JWST programs, 9 HST Programs, 4 Spitzer Space Telescope Programs, 18 ESO Programs, 2 LBT Programs, etc.

**RECENT MAJOR REPORTS AND WHITE PAPERS LED BY APAI**

- 1) **Apai** (Chair) et al. 2019, Report to Space Telescope Science Institute: *Optimal Strategies for Hubble Space Telescope Follow up of TESS-discovered Exoplanets*
- 2) **Apai**, Bixel\*, Rackham et al. 2020, Bull. Am. Astr. Soc. and Astro2020 White Paper: *Nautilus: A Very Large-Aperture, Ultralight Space Telescope for Exoplanet Exploration, Time-domain Astrophysics, and Faint Objects*
- 3) **Apai**, Ciesla, Mulders et al. 2018, White Paper submitted to the NAS Committee on Exoplanet Science Strategy, *A comprehensive understanding of planet formation is required for assessing planetary habitability and for the search for life*
- 4) **Apai** and SAG15 team, NASA EXOPAG Study Assessment Group 15 (<http://tiny.cc/sag15>): *Science Questions for Future High-Contrast Imaging Exoplanet Missions*
- 5) **Apai**, Rackham\*, Giampapa et al. 2018, White Paper submitted to the NAS Committee on Exoplanet Science Strategy, *Understanding Stellar Contamination in Exoplanet Transmission Spectra as an Essential Step in Small Planet Characterization*

\* - students/postdocs advised by Apai

**SELECTED PUBLICATIONS**

210+ refereed, 15 editorially reviewed publications and ~220 non-refereed publications;  
Citations: ~14,000 with h index of 67 (Google Scholar)

- 1) **Apai**, Barnes, et al. 2024, Planetary Science Journal (submitted, under revision)  
*Terminology and Quantitative Framework for Assessing the Habitability of Solar System and Extraterrestrial Worlds*
- 2) **Apai**, Nardiello, Bedin 2021 Astrophysical Journal 906, 64  
*TESS Observations of the Luhman 16 AB Brown Dwarf System: Rotational Periods, Lightcurve Evolution, and Zonal Circulation*
- 3) Dietrich\*, **Apai** 2020 Astronomical Journal 160, 107  
*Hidden Worlds: Dynamical Architecture Predictions of Undetected Planets in Multi-planet Systems and Applications to TESS Systems*
- 4) Bixel\*, **Apai** 2020 Astrophysical Journal 896, 131  
*Testing Earth-like Atmospheric Evolution on Exo-Earths through Oxygen Absorption: Required Sample Sizes and the Advantage of Age-based Target Selection*
- 5) **Apai**, Milster, Kim, Bixel\*, Schneider, Liang, Arenberg 2019 Astron. J., 158, 83  
*A Thousand Earths: A Very Large Aperture, Ultralight Space Telescope Array for Atmospheric Biosignature Survey*
- 6) Rackham\*, **Apai**, Giampapa, 2018 Astrophysical Journal 853, 122  
*The Transit Light Source Effect: False Spectral Features and Incorrect Densities for M-dwarf Transiting Planets*
- 7) **Apai**, Karalidi\*, Marley et al. 2017 Science 357, 683  
*Zones, Spots, and Planetary-Scale Waves Beating in Brown Dwarf Atmospheres*

**PATENTS / INVENTION DISCLOSURES**

1) *An optical device comprising a multi-order diffractive fresnel lens (MOD-DFL) and an achromatizing compensation mechanism, and a method for enhancing images captured using the MOD-DFL*

Thomas D. Milster, Lee C. Johnson, Daniel Apai, 2019, Publication: US20210297601A1

2) *A multi-order diffractive fresnel lens (MOD-DFL) and systems that incorporate the MOD-DFL*

Thomas D. Milster, Daniel Apai, Lee C. Johnson, 2019, Publication: US20210190998A1

3) *Carbon removal or Carbon capture Using Microalgae Cultivated in Scalable Photobioreactors Paired with a Particle Filtration System.*

Daniel Apai, Joel Cuello, U.S. Provisional Patent Application No. 63/327,714

**HONORS AND AWARDS**

2023 Fellow, American Association for Advancement of Science

2022 "The Crofts Radical Hypothesis Lecture", Columbia University

2016 NASA Commendation as Member of the Hubble Space Telescope Science Team

2012 Tinsley Visiting Scholar, Astronomy Department, University of Texas

2004 Max Planck Institute's Patzer Price for Outstanding PhD Dissertation of the Year

2000 PhD Fellowship of the German Academic Exchange Service (DAAD)

1998 Erasmus Scholarship of the European Union to Univ. Jena, Germany

1999 Scholarship of the Hungarian Republic, awarded by the Minister of Education

**SERVICE AS REVIEWER:**

**Journal Referee:** *Science, Astrophysical Journal, Monthly Notices of the Royal Astronomical Society, Astronomy & Astrophysics, Publications of the Astronomical Society of the Pacific, Elements special issue, etc.*

**Review Panels (US):**

51 Pegasi b Prize Fellowship Selection Panel, Heising-Simons Foundation  
NASA Exoplanet Research Program Panel  
US Gemini Large Programs Panel  
Hubble Space Telescope Financial Review Panel (3 year appointment committee overseeing allocation of about \$27M/year R&A funds)  
Hubble Space Telescope Time Allocation Committee (as Panel Deputy Chair [one time], Panel Member (three times), Mid-Cycle Review member [one time])  
Spitzer Space Telescope Time Allocation Committee  
National Science Foundation's *Exoplanets* panel  
NASA Small Bodies Database  
Hubble Space Telescope Director's Discretionary Time Committee  
NASA *Origins of Solar Systems* program  
NSF *Research Experience for Undergraduates* Program  
NASA Astrobiology Institute Director's Discretionary Funds  
NASA *Postdoctoral Fellowship* program  
Giacconi Postdoctoral Fellowship Committee

**International Review Panels (Examples):**

European Research Council *Starting Grant Program*, External reviewer; International Representative to the European Southern Observatory Time Allocation Committee (2 times); Reviewer, Joint Research Actions program (large-scale university-wide efforts) at the University of Liege, Belgium; Swiss National Science Foundation (SPARK, Ambizione, SNSF Professorship); Hungarian Science Foundation; FAPESP (Brazil)

**UNIVERSITY COMMITTEES:**

Member, National Labs Engagement Committee  
University of Arizona Strategy for Energy Research  
Executive Committee, Center for Semi-Conductor Manufacturing, 2023-  
University of Arizona IT Transition Pilot at College of Science, 2023-  
Council of Associate Deans for Research, 2022-  
University Core Facilities Advisory Committee, 2023-  
Chair of Dean's Innovation Funds Committee, 2022-  
Executive Committee, UA Space Institute, 2022-

**DEPARTMENTAL COMMITTEES**

Chair, Diversity and Inclusiveness Committee, 2019-2022  
Chair, Faculty Search Committee (Planetary Science), 2021-2022  
Member, Diversity and Inclusiveness Committee, 2017-2019  
Initiative Owner "Astrobiology", UArizona Strategic Planning Committee, 2018-2020  
Mentor, Molecular and Cellular Biology Junior Faculty, 2019-2021  
Mentor, Steward Observatory Junior Faculty, 2020-2022  
Steward Observatory Annual Performance Evaluation Committee Member, 2019  
Steward Observatory Advisory Committee, Elected Member, 2016-2017, 2018-  
Member, Bok Fellowship Search Committee, 2018-2019  
Organizer, Astronomy Department Faculty Retreat 2017, 2020  
Faculty Search Committee for Endowed Chair (Optical Science), Member, 2019-2020  
Faculty Search Committee (Molecular & Cellular Biology), Member, 2019-2020  
Faculty Search Committee (Astronomy), Member, 2016-2017  
Steward Observatory Advisory Committee, Member, 2016  
Graduate Admission Committee, Chair, 2016  
Graduate Admission Committee, Member, 2012, 2013, 2014, 2015  
Multiple Mirror Telescope Strategic Planning Committee: 2014  
Committee on Mentoring Committees: 2013/2014  
Academic Program Committee: 2012-2015  
Astrobiology Program Council: 2011-2015  
Small Telescopes Committee: 2012  
Molecular and Cellular Biology: Astrobiology Faculty Search Committee: 2016  
Academic Advisor for the Undergraduate Astrobiology Minor 2011-2015  
Academic Advisor for the Graduate Astrobiology Minor 2011-2015

**PROFESSIONAL SERVICE IN SUPPORT OF THE HUBBLE SPACE TELESCOPE MISSION**

- 2010 Editor, Cycle-19 HST Call for Proposals  
2010 Organizer, Galactic Astronomy/Solar System/Exoplanets review panels for HST Time Allocation Committee  
2009 Editor, Cycle-18 HST Call for Proposals  
2009 Analysis of HST's Science Impact, Productivity, and Time Allocation Policy

**COURSES TAUGHT*****Life in the Universe***, The University of Arizona (7 semesters)

General Education course for non-science majors, up to 150 students, 3 credits  
Course taught both in regular classroom setting and modified for full dome digital planetarium

3 credits, Taught in: 2012, 2013, 2014, 2016, 2019, 2020, 2021

***Planetary Astrobiology***, The University of Arizona (7 semesters)

400/500-level course focusing on exoplanet formation, atmospheres, habitability, and characterization

3 credits, Taught in: 2012, 2014, 2016, 2017, 2019, 2020, 2022

***Life, Planets and the Universe***, Johns Hopkins University (1 semester)

Astrobiology course co-taught with J. DiRuggiero, C. Norman

23 students, 3 credits, 300-level

**Spring 2013 Astronomy Journal Club**

**STUDENTS AND POSTDOCTORAL RESEARCHERS ADVISED****VISITING SCIENTISTS IN APAI'S GROUP:**

Dr. Michael McGauley (2013)

Dr. Terry-Ann Sue, Rochester Institute of Technology

Dr. Mark Giampapa (NSF NOIRLab and Raytheon Inc.)

**POSTDOCTORAL RESEARCHERS ADVISED AND THEIR FOLLOWING OR CURRENT POSITIONS:**

Dr. Esther Buenzli (2011-2013)	(Ambizione Fellow at ETH)
Dr. Hao Yang (2013-2016)	(Data Scientist, Carvana )
Dr. Theodora Karalidi (2013-2016)	(Assistant Professor, U. Central Florida)
Dr. Elena Manjavacas (2016-2019)	(Asst. Astronomer, Space Telescope Sci. Inst.)
Dr. Jonathan Rees (2016-2018)	(Support Astronomer, McDonald Observatory)
Dr. Sebastiaan Kriit (2018-2020)	(Lecturer, Exeter University)
Dr. Benjamin Rackham (2019)	(51 Pegasi b Prize Fellow, Scientist at MIT)
Dr. Alex Bixel (2021)	(Senior Engineer at SpaceX)
Dr. Kevin Hardegree-Ullman (2021-)	(Currently Research Associate in Apai's group)
Dr. Kevin Wagner (2020- )	(Hubble Fellow; Res. Faculty at Univ. Arizona)
Dr. Megan Mansfield (2021-2024)	(Hubble/Sagan Fellow, UMD Faculty)
Dr. Martin Schlecker (2022-)	(Currently Research Associate in Apai's group)
Dr. Brittany Miles (2022-)	(51 Pegasi b Fellow, Presidential Fellow)
Dr. Rachael Amaro (2024-)	(Currently Research Associate in Apai's group)

**GRADUATE STUDENTS ADVISED:**

Chaucer Langbert (UA Planetary Science) PhD studies in progress

Chia-Lung Lin (Taiwan Nat'l Central Univ., visiting PhD student at UArizona)

Matthew Murphy (UA Astronomy) - PhD studies in progress

Arin Avsar (UA Planetary Science) - PhD studies in progress

Fuda Nguyen (UA Planetary Science) - PhD studies in progress

Rachael Amaro (UA Astronomy) - now postdoctoral researcher in Apai's group

Jaime Dietrich (UA Astronomy) - now ASU Exploration Fellow

Alex Bixel (UA Astronomy) - now Senior Engineer at SpaceX

Ben Wei Peng Lew (UA Planetary Science) - now Research Associate at NASA Ames

Kevin Wagner (UA Astronomy) - now Hubble Prize Fellow at Apai's group

Yifan Zhou (UA Astronomy) - 51 Pegasi b Fellow at UT Austin; faculty at Univ. Virginia

Benjamin Rackham (UA Astronomy) - 51 Pegasi b Fellow and Researcher at MIT

Justin Rogers (JHU Physics & Astronomy)

Veselin Kostov (JHU Physics & Astronomy, now NASA Postdoctoral Fellow at GSFC)

**MASTER THESES DIRECTED:**

Aidan Gibbs (U Arizona), now astrophysics PhD student at UCLA

Davin Flateau (MSc Thesis, Planetary Sciences), now Astronomy Lecturer at U. Cincinnati

Laszlo Szucs (now postdoctoral researcher at MPE, Garching)

**UNDERGRADUATE STUDENTS ADVISED:**

30+ undergraduate research projects advised/co-advised; several resulted in first-author refereed papers for the students and two in Honors College projects. 7 high school student projects.



**MEETING ORGANIZATION**

- 2023 Senior Facilitator, "Signatures of Life in the Universe", Research Corporation
- 2021-23 Chair, Cloud Academy 3, Les Houches Advanced School
- 2020/22 Chair/Co-Chair, NExSS Quantitative Habitability Science Working Group
- 2020/21 SOC member, HabWorlds 2021
- 2021 Senior Facilitator, "Signatures of Life in the Universe", Research Corporation
- 2019-21 Organizing Committee Member, Eclipsing Exoplanets Conference, Chile
- 2019/2020 Co-organizer, Machina Ex Machina Workshop on Origins of Life, Tucson
- 2018 Moderator, NExSS/EXOPAG SAG16 Biosignatures webinar series
- 2017/18 SOC Member, Conference: "Astrophysical Frontiers in the Next Decade and Beyond"
- 2016/17 Chair, Cloud Academy, Les Houches Advanced Winter School
- 2016/17 Faculty, Les Houches Advanced Winter School on Atmospheric Circulation
- 2015/16 Co-Chair NExSS Winter School at UA Biosphere 2, 30 grad. students
- 2016 SOC member, Disks-Planets workshop at Space Telescope Science Institute
- 2016 SOC member, Exoclimates III, international conference
- 2016 SOC member, Biosignatures workshop
- 2015 Co-organizer, "Exoplanet Mapping" session, at Pathways toward Habitable Planets, Bern, Switzerland
- 2015 Member of Scientific Organizing Committee, *Astrobio 2015*, Santiago de Chile
- 2014 Member, Scientific Organizing Committee, *Beta Pictoris at 30*, Paris
- 2014 Co-organizer, *Exoplanets, Biosignatures, & Instruments School, Biosphere 2*
- 2014 Co-Chair (SOC & LOC), *Search for Life Beyond the Solar System, Tucson*  
~250 participant major international meeting on the astronomical search for life in the universe and the instrumentation required for it
- 2014 Co-convenor, *Session Clouds in Brown Dwarfs & Exoplanets*,  
American Astronomical Society Winter 2014 meeting (session proposal pending)
- 2013 SOC, *Bioastronomy 2013*, Santiago, Chile
- 2012 Convener, Splinter Session "Clouds in Brown Dwarfs & Exoplanets", *Cool Stars 17*
- 2010 Organizing Committee, *STScI May Symposium on Dark Matter*, Baltimore
- 2010 Head of Organizing Committee, *Workshop, Volatile Delivery to Habitable Planets*  
Space Telescope Science Institute, Baltimore
- 2010 Co-organizer of workshop *Dust from the ISM to Rocky Planets*, Budapest
- 2010 Invited Convener, *Stellar and Cometary Mineralogy*, International Mineralogical Association Meeting, Budapest
- 2009- Organizer, STScI-JHU Astrobiology Lecture Series: *Life, Planets, and Universe*
- 2009 Organizing Committee, Decadal Survey Townhall Discussion, Baltimore
- 2009 SOC, *Beyond JWST: Next Steps in UV/OPT/NIR Space Astronomy*, Baltimore

**OUTREACH (EXAMPLES - INCOMPLETE LIST)**

- 2023 Article, "A new, thin-lensed telescope design could far surpass James Webb - goodbye mirrors, hello diffractive lenses", The Conversation, Apai, D., 132K reads
- 2022 Article on JWST and search for life on exoplanets, Impey, C., Apai, D., The Conversation, 441K reads, republished in Science Alert, Space.com, etc.
- 2020 The Conversation article on nearby planetary systems, Apai, D., Dietrich, The Conversation, 14K reads, republished in Science Alert, Space.com, etc.
- 2019 "NASA's TESS spacecraft is finding hundreds of exoplanets - and is poised to find thousands more", Apai, D., Rackham, B. V., The Conversation, 114K reads
- 2017-2019 Nearly 1,000 tweets on astronomy: <http://twitter.com/danielapai>
- 2019 Teen Astronomy Cafe, NOAO, Tucson
- 2019 Astronomy on Tap: Tucson
- 2018 Public Talk, Steward Observatory Public Talk Series
- 2018 Public Talk, Phoenix Spirit of Senses Club
- 2018 Public Talk, Sierra Vista Astronomy Club
- 2018 Teen Astronomy Cafe, NOAO, Tucson
- 2018 Project POEM: Interactive astronomy activity for visually impaired students
- 2014-2016 Co-PI of the Hubble Space Telescope EPO grant *Sky Ambassadors*  
This program included developing classroom materials for high schools based on Apai's HST programs and presenting a lecture and interacting with high school teachers on the context of the materials to high school teachers. The program also included visits to Tucson-area high schools by Astronomy graduate students, who have been advised by Apai and the other two co-PIs of the program.
- 2016 Organizer: *Other Earths* Public Lecture Series.  
Three connected public lectures that attracted a total audience of ~500.
- 2014- Distant Earths and Other Earths Blogs ([distantearth.org](http://distantearth.org) , [otherearth.org](http://otherearth.org))  
These WordPress-based websites provide blog articles on exoplanet-related research and on news items on the Earths in Other Solar Systems (EOS) project led by Apai. Apai created the website, wrote most of the content; now students and postdocs are contributing articles and blog posts. The blogs are now also including interviews with scientists. The most read articles have been viewed by more than 2,000 visitors. The content of the blogs is designed in a way to allow it to be used in extra credit activities in some of the GenEd courses.
- 2011-2016 Various Public lectures on Exoplanet Exploration  
(e.g., Academic Village, Tucson Steward Observatory Public Lectures Science Cafe Tucson, Hubble Briefings for Educators and NASA Solar System Ambassadors, Space Telescope Science Institute, etc.)
- 2010 Professional Consultant for *Stars*, a non-fiction book for fourth-graders, CapStone Press, 2010

**MEDIA COVERAGE:**

Results from Apai's group are often covered in electronic and printed media. An incomplete list of recent press releases and articles is provided here (on a variety of topics, all from projects led by Apai or students/postdocs supervised by Apai):

## EXAMPLE MEDIA COVERAGE:

- [100x the power of JWST? Diffractive lenses could alter astronomy forever](#) (Interesting Engineering)
- [Researchers at the University of Arizona using algae to absorb carbon dioxide emissions.](#) (KOLD13 TV coverage)
- [Could Algae Help Solve Climate Change? 9KGUN TV Report](#)
- [Small but Mighty: How UArizona Professors are Harnessing the Power of Algae to Capture Carbon](#)
- [NASA Selects New Science Teams for Astrobiology Research](#)
- [Life on Ancient Earth and Alien Planets: UArizona to Lead NASA Astrobiology Projects](#)
- [What comes after LUVUOIR? YouTube documentary by Fraser Cain](#)
- [Sky & Telescope: The Future of Astronomy: 2-page story on Nautilus Space Observatory](#)
- [Visiting the tau Ceti Planetary System \(The Conversation article by Apai and Dietrich\)](#)
- [Science Daily: A new lens for life-searching space telescopes](#)
- [Optics & Photonics News: A Different Kind of Eye on the Cosmos by Stewart Wills](#)
- [Astrobiology News: A Thousand Earths: A Very Large Aperture, Ultralight Space Telescope Array for Atmospheric Biosignature Surveys](#)
- [Hubble fortuitously discovers a new galaxy in the cosmic neighborhood](#)
- [Imaging Discovery of a Jovian Exoplanet in a Triple Star System](#) (UA News, [ESO PR](#), [CNN](#), [Guardian](#), [National Geographic](#), [New York Times](#), [Washington Post](#))
- [Spiral Arms Discovered in Planet-forming Disk](#) (UA News)
- [UA Astronomers Show Exoplanet Changing Over Time](#) (UA News)
- [Hubble Directly Measures Rotation of Cloudy 'Super-Jupiter'](#) (HST News Release)
- [UA, ASU teams to search for Alien Life](#) (AZ Daily Star)
- [Hubble Gets Best View of a Circumstellar Debris Disk Distorted by a Planet](#) (HST News)
- [Got Planets? Smaller Stars are Best Bet](#) (UA News)
- [Extrasolar Storms: How's the Weather Way Out There?](#) (UA News)
- [Scientists from around the world exchange ideas on space exploration at Oro Valley conference](#) (AZ Daily Star)
- [Stormy Stars? NASA's Spitzer Probes Weather on Brown Dwarfs](#) (JPL News)