

So you want to work at an Observatory?

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Gemini Observatory

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Maunakea, Hawaii

Gemini Observatory:

AURA

Operating two twin 8m telescopes
on Mauna Kea and Cerro Pachón:
providing access to the entire sky

Hilo, Hawaii



We are Here

We are Here

We are Here

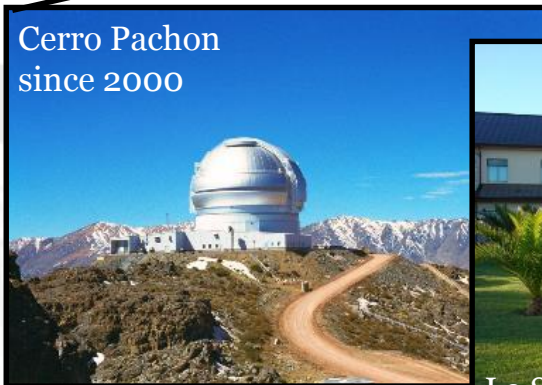
We are Here

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We are Here

Cerro Pachon
since 2000



La Serena, Chile

The International Partnership

International Agreement *2016-2021* includes as partners:
USA, Canada, Brazil, Argentina, and Chile



Shares 2016-2021:
(Budget ~27+x \$M/year)

US 70 %
CA 20 %
BR 7 %
AR 3 %



KASI is a limited-term partner, aspiring to become a full partner



Two institutions from Israel have joined as small, limited term partners

Bear with me...

- Scientist Dilemma
- Engineering Dilemma
- Management corollary
- Merging academia and industry

- Scientist Dilemma
 - Observatories want scientists because they make the best support staff
 - Scientists want to do science, not support

The solution: Do science

(Learn to say no)

- Engineering Dilemma
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Scientist Dilemma

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Management Corollary

- Scientist Dilemma
- Engineering Dilemma
- **Management corollary**
 - Scientists are not trained in management; managers are not trained in science
 - Scientists are trained to be independent, objective, challenging, and anti-management

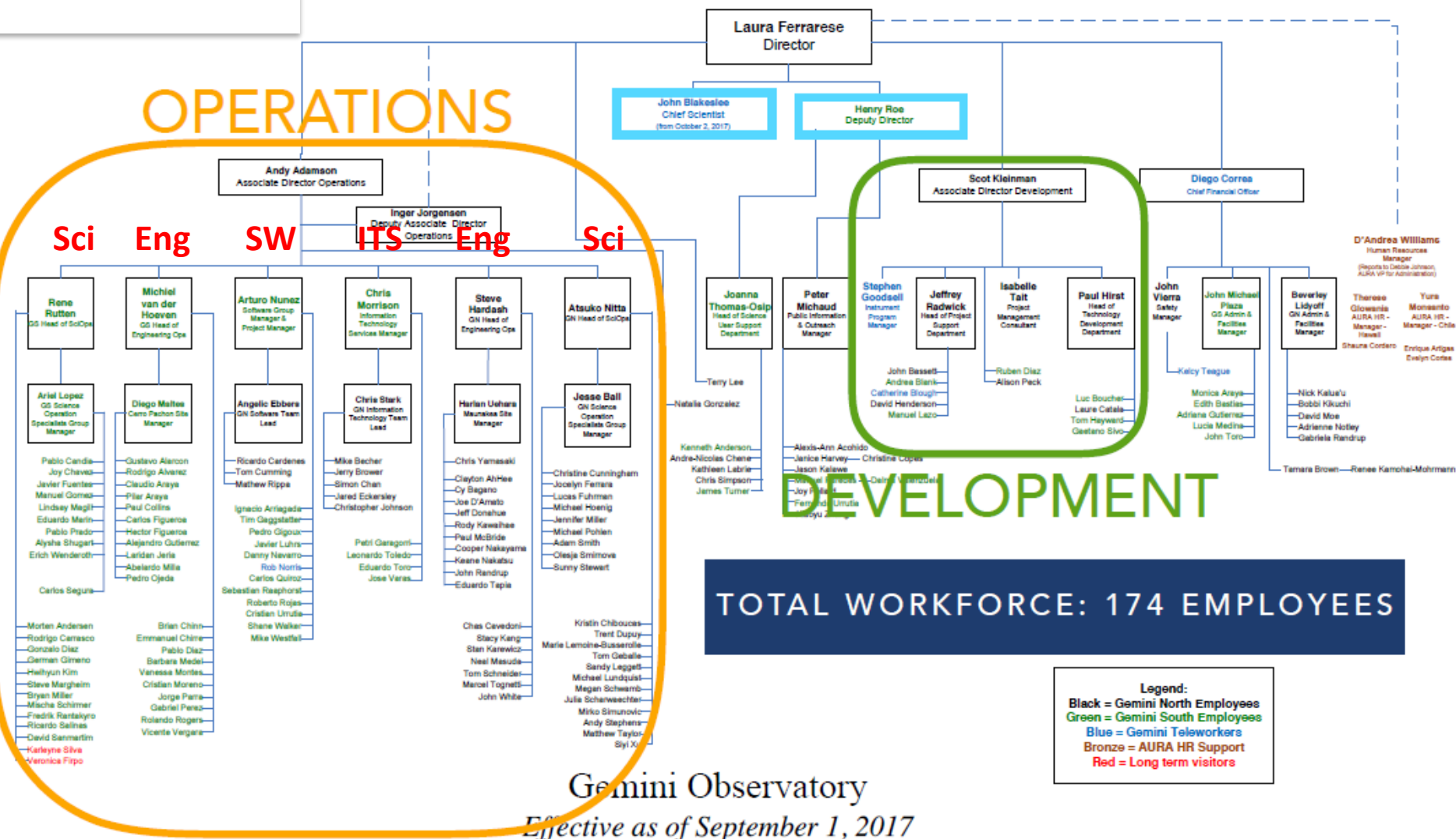
The solution: Learn both

- Merging academia and industry

What I Hire

- Scientist Dilemma
- Engineering Dilemma
- Management corollary
- Merging academia and industry
 - Combine the objective, data-based, scientific method of problem solving with best practices and ideologies from industry to create opportunities and build teams that deliver better products more efficiently*

OPERATIONS



TOTAL WORKFORCE: 174 EMPLOYEES

Legend:
Black = Gemini North Employees
Green = Gemini South Employees
Blue = Gemini Teleworkers
Bronze = AURA HR Support
Red = Long term visitors

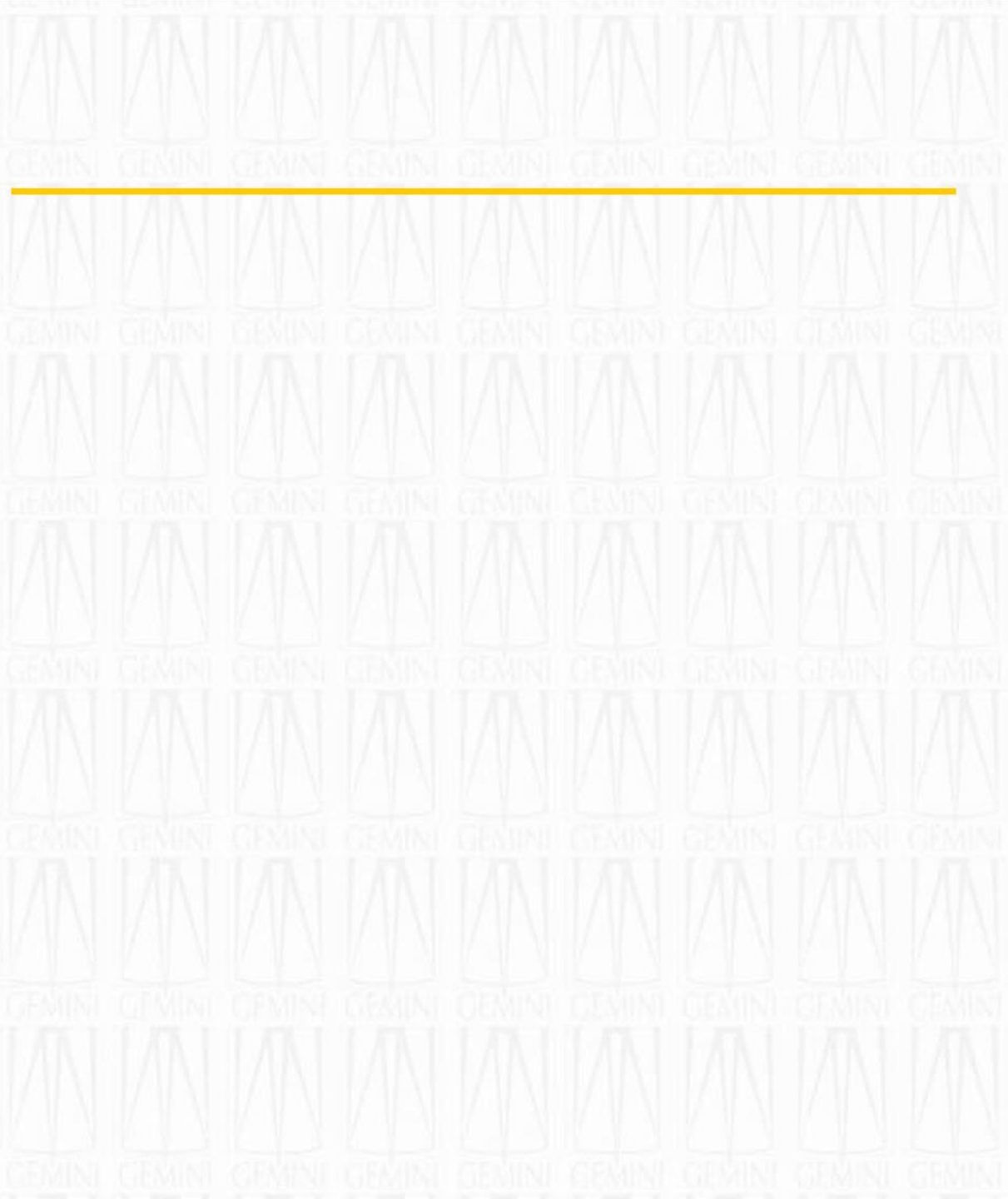


GEMINI

OBSERVATORY



Exploring the Universe, Sharing its Wonders



Site	Instrument		FoV, Mode, Resolution	AO Support
Gemini-N up to 2018	GMOS-N NIRI NIFS GNIRS	360-940 nm 1-5 μm 950-2400 nm 1-5 μm	img 5.5'x5.5' LS, MOS, IFS (5"x7") R:600-4,000 img 20"x20" - 120"x120" IFS (3"x3") R:5000 LS R:1,800-18,000 (+img)	(ALTAIR) ALTAIR ALTAIR ALTAIR
Gemini-S GN in 2018	GMOS-S GSAOI FLAMINGOS-2 GPI	360-940 nm 950-2400 nm 950-2400 nm 900-2400 nm	img 5.5'x5.5' LS, MOS img 85"x85" R: 1,200-3,000 contrast: 10^7 at 0.4"	(GeMS) GeMS (GeMS) XAO
~2018 ~2022	GHOST (GS) Gen4#3 (GS)	360-1000 nm Visible + NIR	2 IFUs in 7' ϕ R: 50,000 + 75,000 aimed to be an LSST follow-up in	(ne)
Visitor INS	TEXES (GN) DSSI (GN/GS) GRACES (GN) Phoenix (GS) POLISH2 (GN) HIPPI (TBC) IGRINS (GS) TIKI (GS) MAROON-X (TBC) G-IRMOS (GS)	5-25 μm 400-1000 nm ~500-1000 nm 1-5 μm optical optical H+K mid-IR 500-1000 nm IR	LS R: 4,000 - 8,000 DSSI - high resolution OnS - high resolution R: 50,000 high-contrast, mid-infrared planet imager precision radial velocity (~1 m/s) deployable IFUs	no AO no AO no AO no AO no AO own XAO no AO GeMS

Strategic Instruments

Tactical Instruments

Strategic Instruments